José Pinto Duarte

Curriculum Vitae

November 2022

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GENERAL INFORMATION

Birth	May 11th 1964, Lisboa, Portugal.
Nationality	Portuguese
Visa status	Permanent resident of the United States
Contacts	**Home:** 129 Kaywood Dr, Boalsburg, PA 16801
	Work: Penn State University, 150 Stuckeman Family Building, University Park, PA 16802
	E-mail: jxp400@psu.edu
	Office phone: +1 814 863 4584 **Cell phone:** +1 814 251 4618

EDUCATION

Habilitation in Architecture   Jul. 08
Faculty of Architecture, Technical University of Lisbon. Grade: Unanimous approval

Ph.D. in Architecture: Design and Computation   Jul. 01
Department of Architecture, Massachusetts Institute of Technology, USA. Grade: 4.9/5.0

Master of Science in Architecture Studies: Design Enquiry   Aug. 93
Department of Architecture, Massachusetts Institute of Technology, EUA. Grade*: 4.9/5.0*

Licenciatura em Arquitectura   Oct. 87
Faculty of Architecture, Technical University of Lisbon. Grade: 15,4/20

Area of expertise   Urban Design/ Architecture/ Housing/ Design Methods
Design and Computation/ Generative Systems/ Shape Grammars/ Digital Fabrication

EXPERIENCE

Teaching and Research

PROFESSOR OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE, CHAIR IN DESIGN INNOVATION, DIRECTOR OF THE STUCKEMAN CENTER FOR DESIGN COMPUTING *School of Architecture and Landscape Architecture, College of Arts and Architecture, Penn State University*	Jan. 16 – present
AFFILIATE PROFESSOR OF ARCHITECTURAL ENGINEERING *Department of Architectural Engineering, College of Engineering, Penn State University*	Mar. 19 – present
AFFILIATE PROFESSOR OF ENGINEERING DESIGN *School of Engineering Design, Technology and Professional Programs, College of Engineering, Penn State University*	Jul. 19 – present
DEAN **FULL PROFESSOR** *Faculty of Architecture, Technical University of Lisbon, now University of Lisbon*	Feb. 12 – Feb. 15 Dec. 10 – Dec. 15
RESEARCHER *CIAUD, Research Center for Architecture, Urbanism and Design*	Jan. 13 – present
VISITING SCIENTIST *MIT Design Laboratory, Department of Architecture*	Sep. 09 – Dec. 15
ASSOCIATE PROFESSOR **VISITING ASSISTANT PROFESSOR** *Faculty of Architecture, Technical University of Lisbon, now University of Lisbon*	Sep. 06 – Dec. 10 Oct. 01 – Sep. 06
RESEARCHER *ICIST, IST Research Center for Structures, Territory, and Construction*	Feb. 02 – Dec. 12
VISITING FULL PROFESSOR **VISITING ASSOCIATE PROFESSOR** *Department of Architecture, Faculty of Science and Technology, University of Coimbra*	Sep. 10 – Aug. 11 Sep. 08 – Aug. 09
ASSISTANT PROFESSOR **LECTURER** *Department of Civil Engineering and Architecture, Instituto Superior Técnico, Technical University of Lisbon*	Feb. 02 – Sep. 06 Sep. 00 – Jan. 02
RESEARCH ASSOCIATE *Media Laboratory, School of Architecture and Planning, MIT*	Jul. 00 – Jun. 03
LECTURER *Department of Architecture, School of Architecture and Planning, MIT*	Jan. 99 – Jun. 00
TEACHING ASSISTANT *Department of Architecture, School of Architecture and Planning, MIT*	Jan. 97 – Jan. 99
RESEARCH ASSISTANT *Intelligent Engineering Systems Laboratory, Department of Civil Engineering, MIT*	Jan. 92 – Jun. 92
RESEARCH ASSISTANT **RESEARCH TRAINEE** *LNEC, National Laboratory for Civil Engineering*	Sep. 93 – Aug. 00 Mar. 90 – Aug. 93

Design and Consulting

FOUNDING PARTNER AND MANAGER   Nov. 04 – Aug. 09
FlexSystems: Urbanism, Architecture, Design and Multimedia

ADVISOR   Jun. 05 – Feb. 06
Technological Plan Coordination Unit (UCPT), Ministry of Economy and Innovation, 18th Constitutional Government

FREE-LANCER ARCHITECT   Jan. 90 – Aug. 00

ARCHITECT   Sep. 88 – Aug. 91
Manuel Taínha Office

ARCHITECT   Jan. 90 – Jun. 90
Carlos S. Lameiro Officee

ARCHITECT TRAINEE   Jun. 87 – Aug. 88
Santa-Rita Arquitectos

ARCHITECT STUDENT TRAINEE   Mar. 87 – May 87
Pardal Monteiro Office

ACADEMIC AWARDS

Awards	**Golden Medal**, "Novel mixture design method for 3D printing eco-friendly concrete using granulated cork," Innowings 2022, International Exhibition of Inventions and technologies, October 20, 2022, Arena, Lublin, Poland. (With 6 co-authors)	2022
	ARCC Research Incentive Award, "Bistable Carbon Fiber Kinetic Screens: Full Scale Construction and Validation of Environmental Daylight Performance." (With E. Vazquez)	2021
	AIA Upjohn Research Initiative Grant, "Adaptive envelopes for a changing climate: exploring bistability for building envelope design." (With E. Vazquez)	2020
	NASA 3D-printed Mars Habitat Challenge, Phase 3 - On-Site Habitat Competition, Construction Level 3 – Subscale Habitat Competition, **2nd Prize** ($200k) (With 6 co-authors)	2019
	NASA 3D-printed Mars Habitat Challenge, Phase 3 - On-Site Habitat Competition, Construction Level 2 – Hydrostatic Test Competition, **3rd Prize** ($33K) (With 6 co-authors)	2019
	NASA 3D-printed Mars Habitat Challenge, Phase 3 - On-Site Habitat Competition, Construction Level 1 – Foundation Test Competition, **2nd Prize** ($82K) (With 6 co-authors)	2018
	Albert Nelson Marquis, Top Educators and Scientists 2018 by Marquis Who's Who.	2018
	https://marquistopeducators.com/2018/05/30/jose-duarte/	
	Albert Nelson Marquis, Lifetime Achievement Award by Marquis Who's Who	2017
	NASA 3D-printed Mars Habitat Challenge, Phase 2 - Structural Member Competition, Level 3 – Head-to-Head Competition, **2nd Prize** ($150K) (With 6 co-authors)	2017
	Scientific Award TU Lisbon/Santander, **1st Prize**, field of architecture	2008
	Scientific Award TU Lisbon/Santander, **Honour Mention**, field of architecture	2007
	Best Paper Award, CAAD Futures Conference 07, Sydney, Australia	2007
	Competition for the Publication of Scientific Texts, Calouste Gulbenkian Foundation and Foundation for Science and Technology	2004
	Hyzen Award, Massachusetts Institute of Technology	1999
Scholarships	**Sabbatical Scholarship,** Foundation for Science and Technology, Portugal	Sep. 09 – Feb. 10
	PhD Scholarship, PRAXIS XXI Program**,** Foundation for Science and Technology, Portugal	Jan. 96 – Jan. 00
	PhD Scholarship, Calouste Gulbenkian Foundation	Sep. 96 – Sep. 99
	Master's Scholarship, SCIENCE Program, Portuguese Council for Scientific and Technological Research	Sep. 91 – Aug. 93
	Fulbright Scholarship, Portguese-American Cultural Commission.	Sep. 91 – Aug. 93
	Tuition Waiver, Massachusetts Institute of Technology, USA	Sep. 91 – Aug. 92
	Research Scholarship, LNEC, National Laboratory for Civil Engineering**,** Portugal	May 90 – Aug. 91
	Summer Scholarship, Institute of International Education, NY	Jun. 91 – Ago. 91

TEACHING ACTIVITY

After the PhD

Bachelor's	**Studio Level III** *TU Lisbon Faculty of Architecture, Program in Architecture, 5ᵗʰ year. Role: instructor*	2001 – 07
	CAAD Studio –Computer Aided Architectural Design Studio *TU Lisbon IST, Program in Architecture, 5ᵗʰ year. Role: responsible and instructor*	2002 – 06
	CAD II – Programming and Fabrication of Architectural Forms *TU Lisbon IST, Program in Architecture, 2ⁿᵈ year. Role: responsibleand instructor*	2001 – 06
	CAD I – Modelling and Visualization of Buildings *TU Lisbon IST, Program in Architecture, 1ˢᵗ year. Role: responsible since 2001and instructor*	2000 – 07

TU Lisbon Faculty of Architecture, Program in Architecture, 5ᵗʰ year. Role: instructor —

Integrated Master's

Studio Level II and III   2007 – 12
TU Lisbon Faculty of Architecture, Program in Architecture, 4th and 5ᵗʰ years. Role: responsible (07-08 and 10-11) and instructor

Digital Design and Fabrication   2010 – 12
TU Lisbon IST, Master's Program in Architecture. 4ᵗʰ and 5ᵗʰ years, 1ˢᵗ semester. Role: responsible and instructor. Elective course.

Programmming and Fabricating for Architecture   2008 – 09
TU Lisbon IST, Master's Program in Architecture. 4ᵗʰ and 5ᵗʰ years, 1ˢᵗ semester. Role: responsible and instructor. Elective course.

Master's

Rules and Models   2006 - 07
TU Lisbon IST, Master's Program in Modern and Contemporary Urban and Architectural Culture, Program Coordinator: Mário Kruger.Role: co-instructor with Mário Kruger (responsible). Elective course.

Mass Customization of Housing   *Spring 2010*
MIT, Master of Science in Architecture Studies. Role: responsible and instructor with Terry Knight. Elective course

Master's and PhD

Advanced Computation Studio: Additive Manufacturing of Concrete Structures   2017 – present
Penn State, SALA, Graduate School. Role: co-responsible and co-instructior with Shadi Nazarian

Advanced Computation Studio: World Studio   2016 – present
Penn State, SALA, Graduate School. Role: responsible and co-instructior with Tim Baird (2016-17), and Marc Miller (2018-20)

Introduction to Shape Grammars   2017 – 19
Penn State, SALA, Graduate School. Role: responsible.

Inquiry into Design Computing   2017 – 18
Penn State, SALA, Graduate School. Role: responsible.

Shape Grammars   2008 – 15
TU Lisbon FA, Doctoral Program in Architecture, 1ˢᵗ semester. Role: responsible and co-instructor with L. Romão

Digital Design and Fabrication   2008 – 15
TU Lisbon FA, Doctoral Program in Architecture, 2ⁿᵈ semester. Role: responsible and co-instructor with G. Henriques.

New Technologies and Urbanism   2008 – 11
TU Lisbon FA, Doctoral Program in Urbanism, 2ⁿᵈ semester. Role: responsible and co-instructor with Carlos Lameiro(08-09) and L. Romão (10-11)

Programmming and Computing in Architecture   2008 – 09
TU Lisbon FA, Doctoral Program in Architecture, 1ˢᵗ semester. Role: responsible and instructor.

Mass Customization of Housing 2008 – 09
TU Lisbon FA, Doctoral Program in Architecture, 2nd semester. Role: responsible and co-instructor with Carlos Lameiro.

Research Methods 2008 – 09
TU Lisbon FA, Doctoral Programsin Arquitecturaand Urbanism, 1st semester. Role: co-instructor with Mário Kruger (responsible), Maria Calado, Dias Coelho, Fernando Caria.

Thesis Prep Seminar 2008 – 09
TU Lisbon FA, Doctoral Program in Arquitectura, 2nd semester. Role: responsible and co-instructor with Carlos Lameiro.

Before the PhD

Master's and PhD   **4.185 - Architectural Design Workshop: Using Grammars in Collaborative Design** *Spring 00*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: lecturer and coordinator with W. J. Mitchell, T. Knight, S. Yee

4.208 - Programming Shape Grammars *Fall 99*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with T. Knight (responsible)

4.184 - Architectural Design Workshop: Rapid Prototyping *Spring 99*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: lecturer and operational coordinator with W. J. Mitchell (responsible), J. Glymph, P. Testa., T. Nagakura.

Spaces In Between Workshop *Spring 99*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with W. J. Mitchell (responsible), Steven Holl, Frank Gehry, Fumihiko Maki, Charles Correa.

4.271 - Introduction to Shape Grammars II *Spring 99*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with G. Stiny (responsible)

4.270 - Introduction to Shape Grammars I *Fall 98*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with G. Stiny (responsible)

4.144 - Architectural Design, Level II Studio *Spring 98*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with P. Testa (responsible)

4.199 - Remote Collaborative Design: The Lisbon Charrette *Fall 97*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant and operational coordinator with W. J. Mitchell (responsible), P. Testa.

4.181 - Architectural Design Workshop: Generative Algorithms *Spring 97*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with W. J. Mitchell, M. Yakeley, A. Li.

4.451 - Architecture: Technology and Form *Spring 93*
MIT, Master of Science in Architecture Studies, Ph.D. in Design and Computation. Role: teaching assistant with D. Dluhosch (responsible).

RESEARCH ACTIVITY

Field	Digital design and fabrication, Mass Customization, Housing, Urban Design

Projects as PI or Co-PI

Sustainable, Resilient, And Customized Affordable Homes For Rural America: Leveraging Digital Design And Additive Construction
Funding: ASDA, Role: Co-Principal Investigator (Co-PI,) Team: Penn State and X-Hab 3D. (Penn State: $34,192, Total: $175,000) Project Duration: 24 months. Submitted on June 30, 2022, pending.

Demonstration of Technical Feasibility and Cost Effectiveness of 3D Concrete Printing as an Alternative to Conventional Construction for Affordable Housing in Alaska's Sub-Arctic Region
Funding: HUD Grant Relating to Research Partnerships FR-6500-N-USP, Role: Co-Principal Investigator (Co-PI,) Team: City of Nome, Alaska, on behalf of a Research Partnership that also includes Penn State and Xtreme Habitats Institute. (Penn State: $850,000, Total: $1,500,000) Project Duration: 24 months. Submitted on June 30, 2022, pending.

Design and construction of 3D printed buildings as carbon sinks: accelerated carbonation using functionally graded fiber reinforced concrete extrusion
Funding: DE-FOA-0002625 Technical Areas: Primary Technical Area: Category B - Building Designs Secondary Technical Area: Category A- Building Materials, Role: Co-Principal Investigator (Co-PI, Team leader at Penn State) Team: several researchers from NREL and Penn State AddCon Lab. (Fed: $3,000,000, Cost Share: $225,000, Total: $3,225,000) Project Duration: 36 months. Submitted on December 20, 2021, not awarded.

Advanced manufacturing for integrated thermal and structural building envelopes through additive concrete deposition, 3D pultrusion, and robotic assembly
Funding: DE-FOA-0002459 Technical Area: Category 3- Building Efficiency, Sub-category E - Building Envelope. Role: Co-Principal Investigator (Co-PI, Team leader at Penn State) Team: several researchers from NREL and Penn State AddCon Lab. ($7,605,221) Project Duration: 36 months. Submitted on August 31, 2021, not awarded.

Analyses of concrete samples with ingredients and engineering analysis of concrete 3D printed box shaped housing structure   Fev 21 – May 21 (extended)
Funding: Xtreme Habitat Institute, USA. Role: Co-Principal Investigator (Co-PI) Team: A. Memari (PI), Aleksandra Radlinska, Shadi Nazarian, Nathan Brown, Sven Bilén, Xiao Ming. ($56,314)

Development of lightweight concrete for 3D printing   Jan 22 – Dez 22
Funding: Materials that Matter at the Human Level - MRI Grant, Penn State, USA. Role: Co-Principal Investigator (Co-PI) Team: Aleksandra Radlinska (PI), Shadi Nazarian, A. Memari, Sven Bilén. ($10,000)

Bistable Carbon Fiber Kinetic Screens: Full Scale Construction and Validation of Environmental Daylight Performance.   Jan 21 – Jun 22
Funding: ARCC Research Incentive Award. Role: Principal Investigator (Co-PI) Team: Elena Vazquez. ($5,000)

Adaptive envelopes for a changing climate: exploring bistability for building envelope design.   Dec 20 – Jun 22
Funding: AIA Upjohn Research Initiative Grant. Role: Principal Investigator (Co-PI) Team: Elena Vazquez. ($50,000)

NSF Engineering Research Center for Artificial Intelligence in Socially Conscious Abodes and Products (AISAP)
Funding: NSF ERC, USA. Role: Non-Lead Co-Principal Investigator (Co-PI) Team: Conrad Tucker (PI), Michael Falk (JHU), Thanos Economou (Georgia Tech), L. Sass (MIT), Branko Kolarevic (U Calgary. (Preliminary proposal submitted on January 2019-Not Funded)

MRI: Acquisition of a 14 Tesla Magnetic Resonance Micro-Imaging System for Rheological, Biological, Preclinical and Materials Research
Funding: NSF ERC, USA. Role: Co-Principal Investigator (Co-PI) Team: Thomas Neuberger (PI). (Preliminary proposal submitted on January 2019-Not Funded)

CDR Designing for Shape-Change: Smart and Bio-Smart Materials in Architectural Skins and Structures

Funding: Collaborarive Design Research Grant, Penn State, USA. Role: Principal Investigator (PI) Team: Benay Gursoy (PI), C. Randall, C. Bull, M. Demirel. ($44,395)

Engineering Research Center for Partenering On Wireless Electricity Research (POWER)
Funding: NSF ERC, USA. Role: Co-Principal Investigator (Co-PI) Team: Shashank Priya (PI). (Preliminary proposal submitted on January 2019-Not funded)

Development of Cement-Free Concrete for 3D Printing of Homes   Jan 19 – Dez 19
Funding: Materials that Matter at the Human Level - MRI Grant, Penn State, USA. Role: Co-Principal Investigator (Co-PI) Team: A. Memari (PI), Shadi Nazarian, Sven bilén, Aleksandra Radlinska, Nick Meisel, Maryam Hojati. ($10,000)

Development of Sustainable Concrete for 3D-printing   Jan 19 – Dez 19
Funding: ENGineering for Innovation & ENtrepreneurship (ENGINE) Grants, Penn State, USA. Role: Co-Principal Investigator (Co-PI) Team: A. Memari (PI), Shadi Nazarian, Sven bilén, Aleksandra Radlinska, Nick Meisel, Maryam Hojati. ($75,000)

Engineering Research Center for AI-Assisted Creation of Digital Artifacts   Mar 18 – Jul 19
Funding: Penn State, USA. Role: Co-Principal Investigator (Co-PI) Team: Conrad Tucker (PI), Rebecca Passonneau, Vasant Honavar, Shyam Sundar. ($70,000)

Digital Innovation through Immersive Technologies: Establishing New Paradigms for Environmental Decision Support   Jul 17 – Jun 18
Funding: Collaborarive Design Research Grant, Penn State, USA. Role: Principal Investigator (PI) Team: T. Baird (PI), A. Klippel, D. Oprean, M. Queiroz, M.A. Dias. ($25,020.25)

The Rio Studio: using technology to promote social integration   Jul 17 – Jun 18
Funding: Collaborarive Design Research Grant, Penn State, USA. Role: Principal Investigator (PI) Team: T. Baird (PI), A. Klippel, D. Oprean, M. Queiroz, M.A. Dias. ($25,020.25)

Customized Sustainable Housing for Split   Jul 17 – Jun 18
Funding: Global Programs, University of Split. Role: Principal Investigator (PI) Team: L. Iulo (co-PI), Hrvoje Njiric, ($7,890)

Combining Traditional Stone Crafting Techniques with Digital Technologies   Jul 17 – Jun 18
Funding: Global Programs, University of Split. Role: Principal Investigator (PI) Team: L. Iulo (co-PI), Boris Trogrlic. ($5,700)

Additive Manufacturing of Concrete   May 17 – present
Funding: Autodesk, USA. Role: Principal Investigator (PI) Team: S. Nazarian (co-PI), S. Bilén, A. Radlinska, A. Memari, Nick Meisel, F. Craveiro, N. Ashrafi, M. Hojatti, Minhyeok ko. ($150,000)

Immersive Virtual Reality (iVR): The Printing Press of the 21st Century and How Learning About Place and Space Will Never be the Same   Jul. 16 – present
Funding: Research Initiation Grant Program, Center for Online Innovation in Learning (COIL), Penn State, USA. Role: Principal Investigator (Co-PI) Team: A. Klippel (co-PI), D. Oprean. ($35,166)

Materials by Design: from functionally-graded materials to seamless architecture   Jul. 16 – June 2018
Funding: The Bowers Grant Program for Excellence in Design and Construction, Penn State, USA. Role: Principal Investigator (PI) Team: S. Nazarian (co-PI), T. Baird, T. Simpson, C. Tucker, A. Radliska, F. Craveiro, N. Ashrafi. ($50,000)

Computing with Materials: towards seamless architecture   Jul. 16 – Dec. 2017
Funding: The Materials Research Institute (MRI) and the Penn State Institute of Energy and the Environment (PSIEE), Penn State, USA. Role: Co-Principal Investigator (Co-PI) Team: Shadi Nazarian (PI), M. Hojatti. ($20,000)

Customized Ceramics: towards a model for the mass customization of home ceramics products   Sep. 11 – present
Funding: FCT, Portugal. Role: Principal Investigator (PI).

Tecton 3D: digital mockup touching the 3rd dimension   Sep. 13 – Sep. 16
Funding: FCT, PTDC/EEI-SII/3154/2012. Team: Joaquim Jorge (PI), Bruno Araújo, João Pereira, Luís Bruno, 2 grantees, INESC-ID; José P. Duarte, Eduardo Castro e Costa, 2 bolseiros, Ulisboa FA. Role: Researcher.

Digital Alberti: Tradition and innovation in architectural theory and practice in Portugal   Mar. 10 – Aug. 14
Funding: FCT, PTDC/AUR-AQI/108274/2008. Team: Mário Kruger (PI), Victor Murtinho, Gonçalo do Canto, Nelson Mota, Hélder Carita, Giovana de Godoi, 3 bolseiros; José P. Duarte, Maria Calado, Bruno Figueiredo, Eduardo Costa, 2 bolseiros, FAUTL; Joaquim Jorge, Bruno Araújo, 1 bolseiro, INESC-ID. Consultores: W.J. Mitchell, G. Stiny, T. Knight, MIT, USA; Gabriela Celani, Unicamp, Brazil.

Sustainable responsive architecture: embedding intelligent behavior in buildings   Submitted Dec. 09
                                                                                   Not funded
Funding: FCT, Portugal. Role: Principal Investigator (PI).

ModelSim: modelling and simmulation in architecture and urbanism   Feb. 09 – Aug. 12
Funding: FCT. Team: Portugal: José P. Duarte (PI), José Beirão, Nuno Montenegro, FAUTL; Mário Kruger, U. Coimbra; Jorge Gil, Space Syntax Ltd.; Brasil: Benamy Turkienicz (coordinator), Andrea Mussi, César Vieira, Rosirene Mayer, Fabiano Pinto, Jonas Jeske, Vanessa Dorneles, Fernanda Schreiner, Rodrigo Allgayer, Bárbara Gonçalves, UFRGS; Gabriela Celani, Daniel Moreira, Regiane Pupo, UNICAMP; Pablo Grazziotin, U. Notignham; Fernando Pereira, UFSC. Role: PI.

City induction: a model for formulating, evaluating, and generating urban plans   Sep. 07 – Aug. 11
Funding: FCT, PTDC/AUR/64384/2006. Team: José P. Duarte (PI), 3 bolseiros, IST; José Beirão, Nuno Montenegro, FAUTL; Jorge Gil, Space Syntax Limited. Consultores: R. Stouffs, TU/Delft; G. Stiny, J. Ferreira, MIT; Bill Hillier, Bartlett School; Mário Krueger, U. Coimbra. Role: PI.

TaxiStand: rethinking the role of taxis in urban mobility through design   Oct. 06 – Sep.07
Funding: IMV-Institut pour La Ville en Movement, Paris, França; C. M. Lisboa. Team: José M. Viegas (PI, TU Lisbon IST), José P. Duarte (TU Lisbon FA), Ana Lia (FBAUL), Pedro Pais de Brito, Marcelo Oliveira (ESTV), Students: IST, FAUTL, FBAUL, IADE, ESTV Role: studio and competition coordinator.

Building Design Components System   Jul. 05 - Set. 06
Funding: Ove Arup, Kingspan. Team: José P. Duarte (PI), Deborah Benrós, IST; Chris Luebkman, Alvise Simondetti, Kristi Shea, Ove Arup. Role: PI.

ISTAR – IST Architecture Research Laboratories   Jul. 04 – Dec. 10
Funding: REEQ/704/ECM/2005, Scientific Equipment Program, FCT. Team: José P. Duarte (PI), Luísa G. Caldas and other ICIST researchers. Role: PI.

Mass Customization: architecture and design   *Sep. 04*
Funding: POSI 289/1.3/c/LVT. Team: Portugal, UK The Netherlands, Turkey, USA. Role: PI.

LX3D – Lisboa em Três Dimensões   Set. 03 – Ago. 06
Funding: Atitude Virtual. team: J. P. Duarte (PI), students, TU Lisbon IST; Vitor Coelho, collaborators, Atitude Virtual. Role: PI.

Innovative Ceramic Covers   Sep. 03 – Aug. 04
Funding: J.B. Coelho. Team: J. P. Duarte (PI), Luisa G. Caldas, students PAC, IST; Sousa Correia, José Pombo, CTCV; J. Coelho, J. Coelho da Silva. Role: PI.

Mud Construction and Material Recycling   Sep. 03 – Aug. 04

Implementation of an Expert System for Generating Housing Programs   Sep. 03 – Aug. 04

Combining Grammars and Space Syntax   Sep. 02 – Aug. 03

Integrating Shape Grammars and Genetic Algorithms   May 03 – May 07

Design and Fabrication of Free-form Ceramic Surfaces   Sep. 02 – Aug. 03

Mass Customization of Housing   Jul. 00 – Jun. 03

A Web-based Universal Design Tool for New Home Construction   Sep. 01 – Aug. 02

Using Grammars for Remote Collaborative Design   Jan. 00 – Mar. 00

Design and fabrication of a Glass Chair   Feb. 99 – Jan. 00

The Lisbon Charrette: Remote Collaborative Design   Sep. 97 – Dec. 99

Quality Social Housing   Jan. 96 – Jun. 00

Consultant   **COSHINES - Computing with Shapes: interpretation, emergence and synthesis**   Submitted Jan. 17 2011

NAADIR – A new approach to architectural design integrating computational descriptions   Abr. 10 – Sep. 14

De.:SID - Design como recurso estratégico empresarial: um estudo dos impactos do design Nov. 07—Oct. 11

Funding: FCT (PTDC/AUR/70607/2006). Team: Luís António Romão (PI), Rita Assoreira Almendra, Eduardo Afonso Dias, José Manuel Monteiro Barata, Pedro Nevado, José Rui Marcelino, Joana Afonso Dias, Francisco José Gomes (TU Lisbon FA); Paulo Urbano (FLUL). Entidades: TU Lisbon FA, Centro Português de Design (CPD) e a Associação Portuguesa de Designers (APD). Consultants: José Pinto Duarte (TU Lisbon FA), Eija Nieminen (Aalto University), e Robin Roy (Open University).

DSSG - Design Synthesis and Shape Generation Workshop. Nov. 07

Discussion of Project Results. Open University, November 30, 2007
Team: Alison McKay (PI), Alan de Pennington, Joanne de Pennington, Hau Hing Chau, Iestyn Jowers, Jessica Diniz, David Hogg (University of Leeds, UK); Steve Garner, Miquel Prats, Chris Earl (The Open University, UK); Sungwoo Lim, Scott Chase (University of Strathclyde, UK); Consultores: Christoph Ertelt (TU Munich, Germany); George Stiny (MIT, USA); José P. Duarte (TU Lisbon, Portugal); Kristina Shea (TU Munich, Germany); Mine Özkar (Middle East Technical University, Turkey); Nick Jinkinson (Industrial Design Manager at the Motorola, UK); Sean Hanna (Bartlett, London, UK).

Urban Buzz: Enabled Self-procurement Simulation Oct 07 – Sep. 10

Funding: Higher Edication Innovation Fund, Reino Unido. Equipa: Michael Kohn (PI), University College London/University of East London. Role: Consultant.

OIKODOMUS: formas emergentes de habitar e viver na Europa do século XXI Oct 07 – Sep. 10

Funding: eLearning Progam EACEA/01/06, EU. Team: Leandro Madrazo (PI), Escola Tècnica Superior d'Arquitectura La Salle, Universitat Ramon Llull (Spain); Hogeschool Voor Wetenschap & Kunst (Belgium); University Pierre Mendes, Grenoble (France); Bialystok Technical University (Poland); Faculty of Architecture, Slovak University of Technology (Slovakia); Instituto Superior Técnico (Portugal); University of Leeds (United Kingdom); University of Southampton (United Kingdom). Role: Consultant.

Virtual Reality System for Serra da Estrela Park Jan. 05 - Set. 05

Funding: Seia Town Hall. Team: João Matos (PI), José P. Duarte, Carlos Brandão, Pedro Trocado, Ana P. Falcão, Ana Amorim, Rodrigo Correia. Role: Consultant.

Housing for the Future Mar. 03 – Mar. 04

Funding: Program POCTI/AUR/39795/2001, FCT, Portugal. Role: Consultant.

PUBLICATIONS

Theses	Duarte J. P. (2001) <u>Customizing Mass Housing: A Discursive Grammar for Siza´s Malagueira Houses</u>. *Thesis submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Design and Computation*, Massachusetts Institute of Technology, Cambridge, USA.

Duarte, J.P. (1993) <u>Order and Diversity within a Modular System for Housing: A Computational Approach</u>. *Thesis submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Master of Science in Architecture Studies*, Massachusetts Institute of Technology, Cambridge, E.U.A.

Duarte, J.P. (1987) <u>Sistemas Modulares: por uma Arquitectura de Terceira Vaga</u>. (Modular Systems: towards third wave architecture) *Thesis submitted in Fulfillmentof the requirements for the Degree of Lic. in Architecture (5-year Professional degree)*, Faculty of Architecture, TU Lisbon.

Articles in International Peer-Review Journals

Muthumanickam, N.; Brown, N.; Duarte. J.; Simpson, T. <u>Multidisciplinary Design Optimization in Architecture, Engineering and Construction: A Detailed Review and Call for Collaboration</u> in SOM. (in preparation)

Duarte, G.; Duarte. J.; Memari, A.; Brown, N.; Gevaudan, J.P. <u>Towards a model for buildability in concrete printing based on material properties</u>, in Construction and Building Materials. (Submitted on October 3, 2022)

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Duarte, J.P. From Earth to Mars and Back: Digital Design and Fabrication of Homes for Low-Income People, **Online Webinar**, Dialogue between Jose Duarte and Raaghavin Eminent Spakers from Across the World Series, Creative School of Architecture, India, June 4, 2020.

Duarte, J.P. From Earth to Mars and back: additive manufacturing of housing in concrete, **Invited Speaker**, **Online Webinar**, City Lights 2020: supporting Penn State Initiative One community Impacting many, Penn State Alumni Association, June 2, 2020.

Duarte, J.P. From Earth to Mars and Back: Digital Design and Fabrication of Houses, **Public Presentation**, UN WUF 2020 - United Nations World Urbanization Forum, Side Event 54-NASA 3D Printed Habitat Challenge Competition, Abu Dhabi National Exhibition Center, Abu Dhabi, UAE, February 11, 2020.

Duarte, J.P. Mass Customization: Digital Design and Fabrication of Houses, **Public Lecture**, CEPT University, Ahmedabad, February 7, 2020.

Duarte, J.P. Mass Customization: Digital Design and Fabrication of Houses, **Keynote Lecture**, ZEMCH 2019, Zero Energy Mass Custom Homes 2019 International Conference, Korean Institute of Science and Technology, Seoul, South Korea, November 26-28, 2019.

Duarte, J.P. Incorporation of BIM for Autonomous Construction, **Keynote Lecture**, Autodesk University 2019, Venitian Hotel, Las Vegas, USA, November 20, 2019.

Duarte, J.P. Da Terra a Marte: construção autónoma de habitação (From Earh to Mars: Autonomous construction of housing), **Keynote Lecture**, 10th Research Colloquium PROARQ, Graduate Program, Faculty of Architecture and Urbanism, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, September 19, 2019.

Duarte, J.P. Fabricação aditiva de estruturas arquitetónicas, **Inaugural Lecture**, Graduate Program, Faculty of Architecture and Urbanism, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, April 25, 2018.

Duarte, J.P. Mass Customization in Architecture, Engineering and Construction, **Public Lecture**, Advanced Architectural Knowledge Seminar on "Innovative Systems for Construction and Rehabilitation", PhD Program, School of Architecture, University of Minho, Guimarães, Portugal, January 4, 2017.

Duarte, J.P. <u>Inserting new technologies in architectural curricula: from research to practice, and to teaching</u>, **Keynote Address**, ASK conference, Faculty of Architecture, Technical University of Warsaw, Warsaw, Poland, February 27, 2016.

Duarte, J.P. <u>Inserção de novas tecnologias no currículos de arquitectura: da investigação, ao ensino e à prática</u> (Inserting new technologies in architectural curricula: from research to practice, and to teaching), **Keynote Address**, V Congresso Internacional de Conhecimento Científico sobre "Inovação, Planejamento Urbano e Tecnologia", Instituto Superior de Ensino do Centro Educacional Nossa Senhora da Auxiliadora - ISECENSA, Campos dos Goytacazes, RJ, Brazil, September 10, 2015.

Duarte, J.P. <u>Alberti Digital: do tratado à materialização física</u> (Digital Alberti: from the treatise to physical materialization)<u>,</u> **Public Lecture**, Universidade Federal Fluminense, Rio de Janeiro, RJ, Brazil, September 8, 2015.

Duarte, J.P. <u>Inserting new technologies in architectural curricula: from research to practice, and to teaching</u>, **Keynote Address**, National Symposium of Computational Design and Architecture on Sustainable digital ecologies: digital design, material and performance, Faculty of Architecture, Özyeğin University, Istanbul, Turkey, June 25, 2015.

Duarte, J.P. <u>Mass Customization: models and algorithms</u>, **Public Lecture**, 1st Workshop Beyond Shape, Universidade Lusófona de Humanidades e Tecnologias, part of the research program "New Architectural Approaches to Urban Space Fragmentation" (ARCH@USF), Lisboa, Portugal, May 18, 2015.

Duarte, J.P. <u>Mass Customization: models and algorithms</u>, **Public Lecture**, School of Architecture and Landscape Architecture, College of Arts and Architecture, Penn State University, State College, PA, USA, May 11, 2015.

Duarte, J.P. <u>Mass Customization: models and algorithms</u>, **Public Lecture**, Digital Darq: Encontros entre o Passado e o Futuro da Arquitectura, Colégio das Artes, Faculty of Science and Technology, University of Coimbra, Coimbra, April 30 2015.

Duarte, J.P. <u>The ULisboa Faculty of Architecture</u>, **Dean's Interchange Meeting on** "Us in the world and the world with Us", ETH Zürich, Switzerland, April 15, 2015.

Duarte, J.P. <u>The ULisboa Faculty of Architecture</u>, **Lecture to Staff**, Kyoto Institute of Technology, Kyoto, March 9, 2015.

Duarte, J.P. <u>Mass Customization: models and algorithms</u>, **Public Lecture**, Kyoto Institute of Technology, Kyoto, March 9, 2015.

Duarte, J.P. <u>Mass Customization: models and algorithms</u>, **Public Lecture**, Seminário de Arquitectura Contemporánea, Arquitectura Contemporánea en La America Latina, Centro de Posgrados de la Facultad de Arquitectura, Universidade de Cuenca, Cuenca, Ecuador, January 28-30, 2015.

Duarte, J.P.; <u>Alberti Digital: do tratado à Materialização Física</u> (Digital Alberti: from the treatise to physical materialization), **Public Lecture**, Post-Graduation Program in Architecture, Rio de Janeiro, Brazil, July 17 2013.

Duarte, J.P.; <u>Inserting New Technologies in Architectural Curricula</u>, **Keynote Address**, ADU 2020 Conference on Innovation and Diversity: Challenges and Opportunities in Architecture, Design and Urbanism, Rio de Janeiro, Brazil, November 26-28, 2013.

Duarte, J.P.; <u>Digital Alberti</u>, **Keynote Address**, 2nd Sustainable Intelligent Manufacturing, SIM 2013, Faculty of Architecture, TU Lisbon, Lisboa, Portugal, June 26-29, 2013.

Duarte, J.P. <u>Mass Customization: models and algorithms</u>, **Keynote address**, in eCAADe 2011, 28th International Conference of the Education and Research on Computer Aided Architectural Design in Europe, on Fragile Places, Ljubljana, Slovenia, September 1, 2011.

Duarte, J.P. <u>Mass Customization of Housing</u>, **Open Conference**, Workshop "Single Family Housing Grammar: New Technologies for Housing Design", Escuela de Arquitectura, Pontificia Universidad Católica de Chile, Santiago, Chile, July 25, 2011.

Duarte, J.P. Mass Customization of Housing, **Open Conference**, Universidad de Bío-Bío, Concepción, Chile, July 20, 2011.

Duarte, J.P. Mass Customization: models and algorithms, **Keynote address**, in SIM 2011, 1ˢᵗ International Conference on Sustainable Intelligent Manufacturing, Leiria, Portugal, June 28–July 1, 2011.

Duarte, J.P. Personalização em Série: modelos e algoritmos, **Guest Lecture**, in 1ª Seminário Internacional AsBEA sobre Arquitectura Digital – BIM, Sustentabilidade, Inovação, Associação Brasileira de Escritórios de Arquitectura, São Paulo, Brasil, June 13–15, 2011.

Duarte, J.P. Tecnologia e Desenvolvimento Económico: assegurar o futuro, **Guest Lecture**, in Workshop Centro Histórico de São Luís: desafios e oportunidades, Câmara Municipal de São Luis do Maranhão, Banco Mundial, São Luís, Brasil, January 25–26, 2011.

Duarte, J.P. Mass Customization: models and algorithms, **Public Lecture**, in AIANY Tech Committee Lecture Series, American Institute of Architects, New York Chapter, Center for Architecture, New York, USA, November 2010.

Duarte, J.P. Mass Customization: models and algorithms, **Lecture**, in KiernanTimberlake Lecture Series, KiernanTimberlake Architects, Philadelphia, USA, November 2010.

Duarte, J.P. A Computer Rule-based Model for Housing and Urban Design: sustainable, affordable, and participatory mass customization, **Public Lecture**, in Networking Session on Incremental Housing: An Urban Proactive Strategy to Meet the Growth Challenges of the Next 20 Years, UN Habitat World Forum 5, Brazil, March 2010.

Duarte, J.P. Mass Customization: models and algorithms, **Public Lecture**, in Simmulating Cities Lecture Series, Bauhaus University, Weimar, Germany, January 2010.

Duarte, J.P. Mass Customization: models and algorithms, **Guest Lecture**, Autodesk, American East Coast, Waltham, Massachusetts, December 2009.

Duarte, J.P. Personalização em Série: modelos e algoritmos, **Keynote address**, Conferência Internacional SiGradi 09, Universidade Prebiteriana de Mackenzie, Escola de Arquitectura e Planeamento Urbano, São Paulo, Brazil, November 2009.

Duarte, J.P. Mass Customization: models and algorithms, **Public lecture**, Computation Group Lecture Series, Department of Architecture, MIT, October 30, 2009.

Duarte, J.P. Personalização em Série: modelos e algoritmos, **Public Lecture**, Conferência sobre Mass Customization and Personalization, Sessão 17-Responsive Places for Living Universidade de Arte e Design (TaiK), Helsínquia, Finlandia, October 5, 2009.

Duarte, J.P. Personalização em Série: modelos e algoritmos, **Public Lecture**, Departamento de Arquitectura e Urbanismo, Escola de Engenharia de São Carlos, Universidade de São Paulo, São Carlos, Brasil, June 10, 2009.

Duarte, J.P. Internacionalização da Pesquisa em Arquitectura e Urbanismo: premissas, objectivos e estratégias, **Public Lecture**, I Seminário de Pesquisa e Pós-Graduação em Arquitectura e Urbanismo da ANPARQ, Universidade Estadual de São Paulo em São Carlos, Brasil, June 9, 2009.

Duarte, J.P. Personalização em Série: modelos e algoritmos, **Public Lecture**, Faculdade de Engenharia Civil, Arquitectura e Urbanismo, Universidade Estadual de Campinas, Campinas, Brasil, January 30, 2009.

Duarte, J.P., City Induction, **Guest Lecture**, Value Lab Workshop: New Methods in Urban Simulation, Swiss Federal Institute of Technology, ETH, Zurique, Suiça, November 22, 2008.

Duarte, J.P. Mass Customization: models and algorithms, **Guest Lecture**, International Symposium on Cultural Technology, Cultural Opportunities, Organizado pela Korean Advanced Institute for Science and Technology, Culture Contents Complex, Seul, Coreia, November 6-7, 2008.

Duarte, J.P. Inclusão de novas tecnologias em arquitectura: estudo de um caso, **Public Lecture** no Seminário sobre "Contemporary Architectural Challenges 2008: conception, production, and performance. Faculdade de Arquitectura da Universidade do Porto, September 22-24, 2008.

Duarte, J.P. From Customized Mass Housing to Flexible urban Design: thoughts on the role of new technologies in architecture, **Public Lecture**, Faculdade de Arquitectura, Universidade de Delft, Holanda, November 2007.

Duarte, J.P. Mass Customization of Architectural Artefacts: elements from research, teaching, and practice, **Public Lecture**, Digital Architect Lecture Series, Universidade Técnica de Praga, República Checa, June 2007.

Duarte, J.P. Arquitectura Democratizada: olhar a Malagueira do Siza à luz das novas tecnologias. Palestra proferida no âmbito do lançamento do n.29 da, Revista NU, Modus Operandi, Universidade de Coimbra, December 2006.

Duarte, J.P.; Rocha, João Marrakech and Evolutionary Model, International Conference, **Presentation**, 1st International Conference on Sharing Architecture Cultures Across the Maghreb and India, Departamento de Arquitectura, Centro de História de Arte, Universidade de Évora, October 2006.

Duarte, J.P. Intellectual Capital in Portugal: From Academic Talk to Governmental Action. **Presentation**, 1st International Conference on Intellectual Capital for Communities and Regions, World Bank, Paris, June 2005.

Duarte, J.P. Algorithmic Approach to Housing Design, **Lecture**, Periferia Sul: um território, uma casa, Workshop com Manuel Gausa, Instituto de Arquitetcura Avanzada da Catalunya. Faculdade de Arquitectura, Universidade Técnica de Lisboa, March 10-13 2005. Organizers: José N. Beirão, Carlos P. Sant'Ana.

Duarte, J.P. Algorithmic Approach to Urban Design, **Lecture**, Periferia Sul: um território, uma casa, Workshop com Willy Muller, Instituto de Arquitetcura Avanzada da Catalunya. Faculdade de Arquitectura, Universidade Técnica de Lisboa, December 9-12 2004. Organizers: José N. Beirão, Carlos P. Sant'Ana.

Duarte, J.P. The Mass Customization of Housing: from research, to teaching, to practice, **Invited lecture**, Ove Arup, London, April 19, 2004.

Duarte, J.P. Arquitectura e Computação: investigação, ensino e práctica. **Keynote Adress**, SIGraDI, Rosário, Argentina, November 2003.

Duarte, J.P. Customizing Mass Housing: A Challenge to Design and Production. **Presentation**, Changing Places Meeting, MIT Media Laboratory, Cambridge, U.S.A., May 2002.

Duarte, J.P., Using Grammars for Collaborative Design, **Presentation**, Workshop on Remote Collaborative Design, Portuguese Pavillion, Hannover, Germany, September 2000.

Duarte, J.P. Computer Generated Design, **Conference in Lecture Series,** Carnegie-Mellon University, Pittsburgh, U.S.A., March 2000.

Duarte, J.P. Computer Generated Design, **Conference in Lecture Series,** Minda de Guinzburg Center for European Studies, Harvard University, Cambridge, U.S.A., April 2000.

Duarte, J.P. Customizing Mass Housing, **Lecture in Meeting**, Arup Explores the Home of the Future, Ove Arup, London, February 2000.

Duarte, J.P. Customizing Mass Housing: The Grammar of Siza's Houses at Malagueira. **Unique Lecture,** Miyagi University, Sendai, and Japanese Institute of Architects, Tokyo, Japan, August 1999.

National   Duarte, J.P From Earth To Mars and back: digital design and fabrication of homes for low-income people, Online Talk, City Lights 2020 supporting Penn State Initiative One community Impacting many, Penn State, June 2, 2020.

Duarte, J.P Urban Grammars: towards flexible urban design, Invited Faculty, Lecture Series, Landscape Architecture Graduate Colloquium, Penn State, October 11, 2019.

Duarte, J.P Design and Fabrication of Mass Customized Housing, Guest Speaker, ARCH 491 Open-Source Housing Systems studio, Penn State, October 10, 2019.

Duarte, J.P Designing and Making the Build Environment: The Role of Computation, Guest Speaker, Lecture Series, College of Information Science and Technology, Penn State, October 8, 2019.

Duarte, J.P, Nazarian, S. Architecture in the Age of Additive Manufacturing, Faculty Lecture Series, Department of Architecture, Penn State, October 4, 2019.

Duarte, J.P Decoding and recoding informal settlements, Guest Speaker, Lecture Series, Manoa School of Architecture, University of Hawai, March 4, 2019.

Duarte, J.P Additive Manufacturing in the Built Environment: technological challenges and opportunities for the AEC sector, Keynote Presentation, PACE Roundtable, Department of Architectural Engineering, College of Engineering, Penn State, November 6, 2018.

Duarte, J.P Solar Trees, Penn State Materials Day, Session on Smart Cities, October 25, 2018.

Duarte, J.P (with T. Baird and D. Oprean) The Rio Studio: Immersive Technology to Support Design Interventions in Informal Settlements. ASLA 2018, American Society of Landscape Architects Annual Conference, Philadelphia, October 22, 2018.

Duarte, J.P. Smart and Connected Communities: context sensitive design, building, and operation of communities. NSF Smart and Connected Communities Collaboration Session, Institute for CyberScience, March 30, 2018.

Duarte, J.P 3D Printing in Architecture: additive manufacturing of architectural structures. Seminar on Unleashing Creativity with 3D Printing, School of Engineering Design, Technology and Professional Programs, Penn State, October 16, 2017.

Duarte, J.P Mass Customization in Architecture, Engineering and Construction. Seminário de Conhecimento Avançado em Arquitetura, Programa Doutoral em Arquitetura sobre "Sistemas Inovadores para a Construção e Reabilitação," Escola de Arquitetura, Universidade do Minho, Guimarães, January 4 2016.

Duarte, J.P. Alberti Digital: do tratado à Materialização Física (Digital Alberti: from the treatise to physical materialization), Seminar **Métodos formais e semi-formais em Arquitectura** (Formal and semi-formal methods in architecture), ESAP, Porto, May 20-22 2013.

Duarte, J.P Cidade Induzida: formulação, geração e avaliação de planos urbanos (City induction: formulating, generating and assessing urban plans). 1st Conference **O oeste evolui sobre Política de solo: novos desafios para a região oeste**. Painel III – O Role da política de solo na construção de uma comunidade sustentável e criativa: o projecto Cidade Induzida e o município de Óbidos. Galeria Nova Ogiva, Óbidos, January 27-28 2012.

Duarte, J.P. Mass Customization: models and algorithms, Seminar **Métodos formais e semi-formais em Arquitectura** (Formal and semi-formal methods in architecture), ESAP, Porto, May 17 2011.

Duarte, J.P. Integração de novas tecnologias no currículo de arquitectura (Integrating new technologies in architectural curriculum). International Conference on **Contemporary Architectural Challenges 2008: Conception, Production, and Performance**, Faculty of Architecture, University of Porto, September 22-24, 2008.

Duarte, J.P. Personalização em série de habitação: o caso da Malagueira em Évora (Mass customization of housing: the case of Malagueira in Évora), Colloquium on **Contemporary Architecture vs. Traditional Architecture,** Projecto Ciência na Cidade: Évora, Programa Ciência Viva, coordinated by University of Évora and Évora Town Hall, June 24 2007.

Duarte, J.P.; Rocha, João Marrakech and Evolutionary Model, **Public Lecture**, International Conference **Sharing Architecture Cultures Across the Maghreb and India**, Department of Architecture, Center for Art History, University of Évora, October 2006.

Duarte, J.P. <u>Construção Modular</u> (Modular Construction), Seminário **Modelar Habitat**, **Public Lecture**, Organized by Centro Tecnológico da Cerâmica e do Vidro, Faculty of Arqchitecture, University of Porto, June 2006.

Duarte, J.P. <u>Arquitectura e Computação: da investigação ao ensino e à práctica</u> (Architecture and Computation: from research, to teaching, to practice). **Public Lecture**, Ciclo de conferências **Prát(ic)a da Casa**, Faculty of Architecture, Technical University of Lisbon, May 2005.

Duarte, J.P. <u>Cerâmica Inovadora</u> (Innovative Ceramics). **Public Lecture**, IADE-Instituto de Arte e Design, March 2005.

Duarte, J.P. <u>Using Grammars to Customize Mass Housing</u>. Workshop **Periferia Sul: um território, uma casa**. Faculty of Architecture, Technical University of Lisbon, March 10-13, 2005.

Duarte, J.P. <u>Algorithmic Approach to Urban Design</u>. Workshop **Periferia Sul: um território, uma casa** (Southern periphery: a territory, a home). Faculty of Architecture, Technical University of Lisbon, December 9-12, 2004.

Duarte, J.P. <u>Artificial Intelligence and Architecture: a step towards mass customisation</u>. **1000 Plateaux**, Artificial Intelligence Plug-in, Experimenta Design 2003, Bienal de Arte de Lisboa, Lisboa, September 2003.

Duarte, J.P. <u>A Malagueira do Siza</u> (Siza's Malagueira). Conferências **Arquitecturas à Margem**, Sessão Iconografias, TU Lisbon IST, Lisboa, April 2002.

Duarte, J.P. <u>Customizing Mass Housing: A Challenge to Design and Production</u>. **2ªs Jornadas de Inovação**. Agência de Inovação, Exponor, Porto, November 2001.

Duarte, J.P. <u>Customizing Mass Housing: A Challenge to Design and Production</u>, **1000 Plateaux**, Experimenta Design 2001, Lisboa, September 2001.

Note: Lectures given at conferences where articles or abstracts have been submitted are included in the publications.

SUPPORT OF SCIENTIFIC ACTIVITY

Organization of conferences

SDB 2022- Sustainable and Digital Building conference, IP Leiria, Portugal, October 27 - 28, 2022. **Scientific Committee Member.**

6th RBDCC - Biennial Residential Building Design and Construction Conference, Penn State, March 2 - 3, 2022. **Scientific Committee Member.**

5th RBDCC - Biennial Residential Building Design and Construction Conference, Penn State, March 4 - 6, 2020. **Scientific Committee Member.**

CityMaker Workshop, SCDC/Hamer Center, Penn State, October 29-November 2, 2018. Organization: Vina Rahimian. **Program Committee Member** (with Lisa Iulo).

Lecture Series on Smart Materials, Materials Research Institute/SCDC, Penn State, Fall 2018. Speaker: Elena Vazquez. **Scientific Committee Member** (with Clive Randall).

4th RBDCC - Biennial Residential Building Design and Construction Conference, Penn State, February 28 - March 1, 2018. **Local Organization Committtee Member.**

SustainableCustomized Housing Workshop, Split, University of Split, September 4-8, 2017. **Lecturer** (with Lisa Iuolo, Ana Svenko, Hrvoje Njirić, and NenoKesić).

Mass Customization and Design Democratization Symposium, Philadelphia, PA, May 12-13, 2017. **Co-Chair** (with Branko Kolarevic).

1st International Symposium on Cities, Energy, Information, Penn State, State College, PA, February 3-4, 2017. **Program Committee Member.**

1st International Conference on Sustainable Smart Manufacturing, S2M 2016, Faculty of Architecture, University of Lisbon, Lisbon, Portugal, October 20 - 22, 2016. **International Chair for North America.**

Workshop on **Shape grammars in product design and engineering**, Kyoto Institute of Technology, Kyoto, Japan, March 10th-11th, 2015. **Co-chair** (with Andrew Li).

2nd Sustainable Intelligent Manufacturing, SIM 2013, Faculty of Architecture, University of Lisbon, Lisboa, Portugal, June 26-29, 2013. **Chair.**

Workshop on **Housing Grammars: new technologies for Housing Design**, Alfero Computation Laboratory, Campus Lo Contador, Universidad Católica de Chile, Chile. July 22-27, 2011. **Co-Chair** (with Arturo Lyon Gottlieb, Rodrigo García Alvarado). Funding: Fondecyt 1100374.

Workshop on **Urban planning and mobility-on-demand for the new urban village**, Óbidos Town Hall, Óbidos, Portugal. October 25-29, 2010. **Co-Chair** (with Kent Larson).

Workshop on **Digital Desigand Fabrication**, Instituto Superior Técnico, TU Lisbon, Lisbon, Portugal. June 20-22, 2010. **Chair**.

Workshop on **Generative Urban Design** at the 3rd International Conference on Design Computing and Cognition, DCC 2008, Georgia Tech, Atlanta, GA, U.S.A. June 21-25, 2004. **Co-chair** (with José Beirão and Rudy Stouffs).

Workshop on **Rule-based design of exterior spaces**, University of Minnesota / Faculty of Architecture, TU Lisbon, Lisbon, February 29th-March 6th, 2008, Organization: Pedro Ravara, TU Lisbon FA; Arthur Chen, University of Minnesota. **Scientific Coordinator**.

Seminar ICIST on **From Digital to Material**, Instituto Superior Técnico, TU Lisbon, Lisboa, October 3, 2006. **Chair.**

Seminar ICIST, 2nd International Conference on **Symbiotic Relationship Between Architecture and Engineering: Innovation & Contemporary Challenges,** Instituto Superior Técnico, TU Lisbon, Lisbon, March 29, 2006. **Co-chair** (with Luisa Caldas).

eCAADe 2005, 23rd International eCAADe Conference on **The Quest for New Paradigms**. Technical University of Lisbon, September 17-20, 2005, Lisbon, Portugal. **Chair**.

Workshop on **Implementation Issues in Generative Design Systems** at the 1st International Conference on Design Computing and Cognition, DCC 2004, MIT, Cambridge, MA, U.S.A. July 17-18, 2004. **Co-chair** (with Luisa Caldas).

Scientific Committees of Conferences

eCAADe 2022. 40th International eCAADe Conference, Ghent, Belgium, September 13-16, 2021. **Review Committee Member and Session Chair.**

DCC 2022, 10th International Conference on Design Computing and Cognition, University of Strathclyde, 2 – 3 July 2022, Glasgow, Scotland UK. **Advisory Board Member.**

eCAADe 2021. 39th International eCAADe Conference, Novi Sad, Serbia, September 8-10, 2021. **Review Committee Member and Session Chair.**

DCC 2020, 9th International Conference on Design Computing and Cognition, Georgia Tech, 29 June – 1 July 2020, Atlanta, USA. **Advisory Board Member.**

eCAADe 2020. 38th International eCAADe Conference, Online, Europe, September 16-18, 2020. **Review Committee Member and Session Chair.**

ProDPM 2019. 1st International Conference on Progress in Digital and Physical Manufacturing, Leiria, Portugal, October 2-4, 2019. **Scientific Committees Member.**

eCAADe 2019. 37th International eCAADe Conference, Porto, Portugal, September 11-13, 2019. **Review Committee Member and Session Chair.**

eCAADe 2018. 36th International eCAADe Conference, Lodz, Poland, September 19-21 2018. **Review Committee Member and Session Chair.**

DCC 2018, 8th International Conference on Design Computing and Cognition, Politecnico di Milano, Lecco Campus, Italy, July 2-4, 2018. **Advisory Board Member.**

CAADRIA 2018, 23rd International Conference on International Conference on Computer-Aided Architectural Design Research in Asia, CAADRIA 2018, Tsinghua University, Beijing, China, May 17-19, 2018. **Session Chair.**

eCAADe 2017. 35th International eCAADe Conference, Rome, Italy, September20-22 2017. **Review Committee Member and Session Chair.**

eCAADe 2016. 34th International eCAADe Conference, Oulo, Finland, August 22-26, 2016. **Review Committee Member.**

EAEA13, 13th European Architectural Envisioning Conference on Space/ Time/ Meaning, Glasgow, UK, September 6-8, 2017. **Program Committee Member.**

DCC 2016, 7th International Conference on Design Computing and Cognition, Northwestern University, Evanston (Chicago), USA, June 27–29, 2016. **Vice-chair, Program Committee Member.**

InPlay 2006, International conference on Changeable Architectures, July 11-23, 2016, ISCTE-Instituto Universitário de Lisboa, Lisbon, Portugal. **Program Committee Member.**

4th Internatinal Seminar of the AEAULP, Academy of Portuguese-Speaking School of Architecture and Urbanism, on The Language We Inhabit, Belo Horizonte, Minas Gerais, Brazil, April 25-28, 2017. **Scientific Committee Member**.

4th eCAADe Regional International Workshop, Novi Sad, Serbia, May 19-20, 2016. **Scientific Committee Member**.

Sinergi 2015, International Conference Social Integration through Urban Growth Strategies on Inclusive/Exclusive cities, Skopje, Macedonia, November 18-19, 2015. **Scientific Committee Member**.

SiGradi 2015, XIX Congress of the Ibero-American Society of Digital Graphics, Florianópolis, Santa Catarina, Brasil, November 22-27, 2015. **Scientific Committee Member**.

PACT 2016, International Conference on: Parallelism in Architecture and Computing Techniques, organized by IEREK (International Experts for Research Enrichment and Knowledge Exchange and The University of East London (UEL), London, September 12-14, 2016.

1st Workshop Beyond Shape, Universidade Lusófona de Humanidades e Tecnologias, Lisboa, Portugal. May 18, 2015. **Scientific Committee Member**.

eCAADe 2015. 33st International eCAADe Conference, September 2015, Vienna, Austria. **Scientific Committee Member and Session Chair**.

eCAADe 2014. 32nd International eCAADe Conference, September 2014, Vienna, Austria. **Scientific Committee Member**.

SIPCUAM 2014. International Seminar Urban Cultural Planning in Metropolitan Areas on Innovation and Creativity process in post-suburban space revitalization, Almada. November 6-7, 2014. **Honor Committee Member.**

eCAADe 2013. 31st International eCAADe Conference, September 2013, Delft, The Netherlands. **Scientific Committee Member**.

4º Congresso Nacional da Construção, ITeCons - Instituto de Investigação e Desenvolvimento Tecnológico em Ciências da Construção, University of Coimbra, December 18-20, 2012. **Scientific Committee Member.**

eCAADe 2012. 30th International eCAADe Conference, September 2012, Prague, Czech Republic. **Scientific Committee Member**.

DCC 2012, 3nd International Conference on Design Computing and Cognition, Texas A&M University, College Station, Texas. 8-10 June 2012. **Vice-chair, Program Committee Member**.

7VCT, 7th Virtual Cities and Territories 2011, Nova University of Lisbon, Lisbon. October 11-13. **Scientific Committee Member.**

ACADIA 2011, International Conference of the Association for Computer-Aided Design in Architecture, The Cooper Union, New York City, New York, Canada, **Peer-reviewing Committee Member**.

SIM 2011, International Conference on Sustainable Intelligent Manufacturing, Centre for Rapid and Sustainable Product Development (www.cdr-sp.ipleiria.pt), Polytechnic Institute of Leiria, Portugal, June 29-July 1, 2011. **Scientific Committee Member.**

CAADRIA 2011, 16th International Conference of the Association for Computer-Aided Architectural Design Research in Asia, Newcastle on Circuit Bending, Breaking and Mending, Australia, April 27-29, 2011. **Scientific Committee Member.**

eCAADe 2010. 28th International eCAADe Conference, September 2010, Zurich, Switzerland. **Session Chair,** Session 6.2: Design Tool Development.

DCC 2010, 2nd International Conference on Design Computing and Cognition, Technical University of Eindhoven, Eindhoven, The Netherlands. July 10-12, 2010. **Vice-chair, Program Committee Member, Session Chair,** Session 3: Design Methodologies.

ACADIA 2010, International Conference of the Association for Computer-Aided Design in Architecture, The Cooper Union, New York City, New York, USA, **Peer-reviewing Committee Member**.

VR 2010. IEEE Virtual Reality 2010 Conference. **Paper referee**.

eCAADe 2009. 27th International eCAADe Conference, September 2009, Istambul, Turkey. **Scientific Committee Member**.

eCAADe 2008. 26th International eCAADe Conference, September 2008, Antwerpen, Belgium. **Scientific Committee Member and Session Chair**, Session 17 on Shape studies.

DCC 2008. 3rd International Conference on Design Computing and Cognition, Georgia Institute of Technology, USA. June 21-22, 2008. **Vice-chair and Session Chair,** Session 3.

SIGRADI 2007. XI Congresso Ibero-Americano de Gráfica Digital on Communication in the Visual Society, Ciudad de Mexico, Mexico. October 22-25, 2007. **Scientific Committee Member**.

eCAADe 2007. 25th International eCAADe Conference on Predicting the Future. September 26-29, 2007, FH Wiesbaden/FH Frankfurt, Germany. **Scientific Committee Member**.

CAAD Futures 2007. 12th International CAAD Conference on Integrating technologies for computer aided design, July 11- 13, 2007, University of Sidney, Sidney, Australia. **Scientific Committee Member, Session Chair**, Session 3: Becoming Determinable. **Chair**, Best Presentation Award selection committee.

CAADRIA 2007. 12th International CAADRIA Conference on Digitalization and Globalization. April 19-22, 2007, Southeast University, Nanjing, China. **Scientific Committee Member**.

eCAADe 2006. 24th International eCAADe Conference. September 6-9, 2006, University of Thessaly, Volos, Greece. **Scientific Committee Member, Session Chair,** Session 18: Parametric Design and Modelling.

CSAAR 2006. International conference on Changing Trends in Architectural Design Education: Sharing Experiences and Building Partnerships across the Mediterranean Rim, Center for the Study of Architecture in the Arab Region (CSAAR) and the National School of Architecture (Ecole Nationale d'Architecture-ENA), Rabat, Morocco, 14-16 November 2006. **Review Committee Member.**

Third Forum on Architectural Education themed on Global Area for Architectural Education, Istambul November 16-18, 2006. **Scientific Committee Member**.

DDSS 2006, Design Decision Support Systems, Technical University of Eindhoven, Eindhoven, The Netherlands. July 04-07, 2006. **Scientific Committee Member**.

DCC 2006. 2nd International Conference on Design Computing and Cognition, Technical University of Eindhoven, Eindhoven, The Netherlands. July 10-12, 2006. **Vice-chair, and Session Chair,** Session 3: Design Methodologies.

SIGRADI 2005. IX Congresso Ibero-Americano de Gráfica Digital, Lima, Peru. November 21-23 2005. **Scientific Committee Member**.

eCAADe 2005. 23rd International eCAADe Conference. September 17-20, 2005, Technical University of Lisbon, Lisbon, Portugal. **Chair, Scientific Committee member**.

CIBW102 2005. 1st International Conference on Information and Knowledge Management in a Global Economy: Challenges and Opportunities for Construction Organizations**. Session Chair,** Session on Information Management and Knowledge. May 18-20, 2005. Lisboa, Portugal.

Workshop **Periferia Sul: um território, uma casa**. With Willy Müller, Instituto de Arquitectura Avanzada da Catalunya. Faculdade de Arquitectura, Universidade Técnica de Lisboa, December 9-12, 2004. **Coordenador Científico.** Organizers: José N. Beirão, Carlos P. Sant'Ana.

Workshop **Periferia Sul: um território, uma casa**. With Manuel Gausa, Instituto de Arquitectura Avanzada da Catalunya. Faculdade de Arquitectura, Universidade Técnica de Lisboa, 10 a 13 de Março de 2005. **Coordenador Científico.** Organizers: José N. Beirão, Carlos P. Sant'Ana.

SIGRADI 2004. VIII Congresso Ibero-Americano de Gráfica Digital, São Leopoldo, Brasil. November 10-12, 2004. **Scientific Committee Member**.

eCAADe 2004. 22nd International eCAADe Conference. September 15-18, 2004, Royal Institute of Fine Arts, Copenhagen, Denmark, September 2004. **Scientific Committee Member**.

Workshop on **Implementation Issues in Generative Design Systems** at the 1st International Conference on Design Computing and Cognition, DCC 2004. MIT, Cambridge, MA, U.S.A. **July 17-18, 2004. Chair.**

DCC 2004. 1st International Conference on Design Computing and Cognition, MIT, Cambridge, MA, U.S.A. July 19-21, 2004. **Local-chair, Scientific Committee Member**.

DDSS 2004. 7th International Conference on Design & Decision Support Systems in Architecture and Urban Planning. Eindhoven, Organized by Faculty of Architecture, Building, and Planning, Eindhoven University of Technology, The Netherlands. July 2-5, 2004. **Scientific Committee Member**.

CONVR 2004. Conference on Construction Applications of Virtual Reality. Organized by ADETTI/ISCTE, Lisbon, Portugal, 13-15 September 2004. **Program Committee Member**.

CONVR 2003. Conference on Construction Applications of Virtual Reality. Organized by Virginia Tech, USA, and University of Teesside, UK. September 24-26, 2003, Virginia Tech, Blacksburg, Virginia, USA. **Program committee member**.

SIGRADI 2003. 7th International Conference on Digital Culture and Difference, Rosario, Argentina. November 5-7 2003. **Scientific Committee Member**.

EAI9 2003. 9th EuropIA International Conference. Organized by Delft University of Technology, The Netherlands, and Istanbul Technical University, Turkey. October 8-10, 2003, Istanbul Technical University in Istanbul, Turkey. **Scientific Committee Member**.

Eurographics 2003. Annual Conference of the European Association for Computer Graphics. September 1-6, 2003, University of Granada, Spain. **Scientific Committee Member**.

eCAADe 2003. 21st International eCAADe Conference, Austria. September 17-20, 2003, Graz University of Technology, Graz, Austria. **Scientific Committee Member**.

CE 2003. 10th ISPE International Conference on Concurrent Engineering: Research and Applications. **Vice-chair** of session on Design Knowledge Sharing Through Internet Application. 26-30 July 2003 Funchal, Portugal.

CE 2002. 9th ISPE International Conference on Concurrent Engineering: Research and Applications. **Vice-chair** of session on Design Knowledge Sharing Through Internet Application. 27-31 July 2002 Cranfield, U.K.

Scientific Committee of Journals	**ASM Handbooks**. Article Reviewer.	Oct 21
	JBE, Journal of Building Engineeringe. **Reviewer.**	Oct 21
	Biomimicry MDPI, Basel, Switzerland. **Article Reviewer**, one article.	Oct. 22
	Additive Manufacturing, Elsevier, Amsterdam, The Netherlands. **Article Reviewer**, several articles.	Oct. 22
	Automation in Construction, Elsevier, Amsterdam, The Netherlands. **Article Reviewer**, several articles.	2021, 22
	Theoretical Computer Science, Journal of Theoretical Computer Science. **Reviewer.**	May 20

ConBuildMat, Journal of Construction and Building Materials. **Reviewer.**	Oct. 19
A|Z ITU, Journal of the Faculty of Architecture. **Reviewer.**	Nov. 19
JAE, Journal of Architectural Engineering. **Associate Director.**	Jan. 19 – pres.
IJAC, International Journal of Architectural Computing. **Editorial Board Member.**	Jan. 18 – pres.
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Editorial Advisory Board Member**	Jan. 17 – pres.
NNJ, Nexus Network Journal, Springer. **Editorial Board Member.**	Mar. 13 – pres.
Cadernos Proarq, Universidade Federal do Rio de Janeiro, Faculdade de Arquitectura e Urbanismo, Programa de Pós-Graduação. **Editorial Board Member.**	Mar. 13 – pres.
Construção Magazine, Engenho e Média, Lda., **Scientific Committee Member.**	Mar. 12 – pres.
Artitextos, **Ar** - Cadernos de Arquitectura da FAUTL e **Ur** - Cadernos de Urbanismo da FAUTL, **Membro da Equipa de Revisão Paritária** (Referee) das publicações do CECFA - Centro Editorial e de Comunicação da Faculdade de Arquitectura da UTL	Mar. 11 – pres.
UDI, Urban Design International, Palgrave Macmillan Journals, Houndmills, Basingstoke, Hampshire, Reino Unidos, http://www.palgrave-journals.com/thr/index.html. **Member of the Editorial Board**	Feb. 10 – pres.
Arquitetura Revista, Revista Semestral, UNISINOS - Universidade do Vale do Rio dos Sinos, http://www.arquiteturarevista.unisinos.br. **Membro do Comité Científico.**	Sep. 06 – pres.
PARC, Pesquisa em Arquitetura e Construção, **Revista Semestral**, Departamento de Arquitetura e Construção da Faculdade de Engenharia Civil, Arquitetura e Urbanismo da UNICAMP, http://www.fec.unicamp.br/~parc. **Membro do Comité Científico**	Apr. 06 - pres.
CAD Journal, Computer-aided design, Elsevier, Amsterdam, The Netherlands. **Article Reviewer**, article.	2016
Automation in Construction, Elsevier, Amsterdam, The Netherlands. **Article Reviewer**, several articles	2016, 2015
AIEDAM, Artificial Intelligence in Engineering, Design, and Manufacturing. **Article Reviewer**, several articles	2015
Nexus Network Journal: architecture and mathematics, Kim Williams Books, in print by Birkhäuser Publishers and online at SpringerLink. **Reviewer.**	June 15
International Journal of Civil Engineering and Architecture, Horizon Research Publishing, USA. **Reviewer.**	Jun. 15
JCSS, Journal of Computer and System Sciences, Elsevier, Amsterdam, The Netherlands. **Article reviewer.**	May 15
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer.**	Apr. 15, Apr. 16
IJAC, International Journal of Architectural Computing. **Reviewer**, March 12 issue.	Jan. 12

Design Studies, Elsevier, Amsterdam, The Netherlands. **Article reviewer.**	May 11
Automation in Construction, Elsevier, Amsterdam, The Netherlands. **Article reviewer.**	Fev. 11
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer.**	Jan. 11
AIEDAM, Artificial Intelligence in Engineering, Design, and Manufacturing, special issue on "Representing and Reasoning about 3D space". **Article Reviewer.**	Nov. 10
Arquitectura Revista, Architecture Reviewed)**,** By-annual Journal, UNISINOS – University of Vale do Rio dos Sinos, Brasil. **Reviewer**, October 10 issue.	Apr. 10
IJAC, International Journal of Architectural Computing. **Reviewer**, June 10 issue.	Apr. 10
Footprint, Delft School of Design journal on "Digitally Driven Architecture". **Article reviewer.**	Feb. 10
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer.**	Nov. 09
UDI, Urban Design International, Palgrave MacMillan, London, UK. **Article reviewer.**	Oct. 09
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer.**	Apr. 09
AIEDAM, Artificial Intelligence in Engineering, Design, and Manufacturing. **Article Reviewer**, Special Issue based on DCC '08 conference.	Feb. 09
IJAC, International Journal of Architectural Computing. **Reviewer**, December 08 issue.	Oct. 08
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer.**	Jul 08
AIEDAM, Artificial Intelligence in Engineering, Design, Architecture and Manufacturing, Spon/Routledge, UK, http://www.rbri.uk. **Article Reviewer.**	May 08
BRI, Building Research and Information, Article **Reviewer**, Spon/Routledge, May 2008, UK based journal. http://www.rbri.uk.	May 08
IJAC, International Journal of Architectural Computing, special issue on papers from the CAADRIA 05 proceedings. **Reviewer**, December 08 issue.	Dec. 07
Journal of the Faculty of Architecture, Middle East Technical University, Ankara, Turkey. **Article reviewer.**	Sep. 07
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer**	Apr. 07
OHI Internacional Journal, Jamal AL-qawasmi, Karim Hadjiri (eds) Issue on Architecture in the Digital Age, UK. **Guest reviewer.**	Dec. 06
EPB, Environment and Planning B: Planning and Design, Pion Ld., London, UK. **Article reviewer.**	Sep. 06
IJAC, International Journal of Architectural Computing, special issue on papers from the CAADRIA 05 proceedings, **Editorial Board Guest Member** December 05 issue.	Aug. 05

Scientific Committes of Books	Methods and Applications of Geospatial Technology in Sustainable Urbanism, José António Tenedório, Rossana Estanqueiro, and Cristina Delgado Henriques (eds.), IGI GLOBAL, Hershey, PA, USA. **Advisory Board Member.** DOI: 10.4018/978-1-7998-2249-3	Mar. 21
	Book Series on Advances in Media, Entertainment, and the Arts, IGI GLOBAL, Hershey, PA, USA. **Advisory Board Member.**	Feb. 17
	War Science Architecture: From Crystallography to Architecture Computing, Research in Architecture monograph series, Landscape Architecture and Built Environment Research books, Routledge (an imprint of Taylor and Francis). **Book Reviewer.**	Jun. 16
	Review of two books on the insertion of technology in home spaces. Springer-Verlag, London, U.K.	Nov. 02
Scientific Committes of Exhibitions	Vera World Fine Art Festival, Cordoaria Nacional, Lisbon. Role: judging committee member.	Sep. 14, Sep. 15

ADVISING AND SUPERVISION OF RESEARCH AND ACADEMIC WORK

Bachelor's Theses	**Design of commerce, office, and housing complex for teleworkers**	Jun. 07

Advisee: Jakub Dınge
Role: co-Advisor, Advisor: Ivan Kroupa.
Program: Program in Architecture, Technical University of the Czech Republic, Prague.
Situation: Completed in June 2007

Reconversion of harbourstorage silos into a mixed-use building   Jun. 07
Advisee: Jana Stepkova.
Role: co-Advisor*, Advisor:* Ivan Kroupa.
Program: Program in Architecture, Technical University of the Czech Republic, Prague.
Situation: Completed in June *2007*

Biela: Progetto per Residenza nel Polo di Interscambio dell'Area ex Lanifici Rivetti   Apr. 06
Advisee: Andrea Vercellotti.
Role: co-Advisor*, Advisor:* Ernesto D'Alfonso
Program: Tese di Laurea Specislistica in Architettura, Politécnico di Milano, Facultá di Architettura, Italia
Situation: Completed on *April 7 2006*

Integrated Master's Theses   **Translation of Alberti's Treatise into Physical Models: using digital prototyping and fabrication**   Mar. 12
Advisee: Eduardo Castro e Costa
Role: Advisor*, Co-Advisor:* Mário Kruger, U. Coimbra; Maria Calado,TU Lisbon FA
Program: Integrated Master's Program in Architecture, TU Lisbon FA
Situation: Completed in March 2012
Publicações: 2 conf. papers

Adaptability of Office Buildings   Dec. 11
Advisee: João Dória.
Role: Advisor
Program: Integrated Master's in Architecture, TU Lisbon FA
Situation: Completed in Decdember 2011

Mass Customization of Multi-family Housing   Dec. 11
Advisee: Carlos Loureiro
Role: Advisor*, Co-Advisor:* Tânia Marques
Program: Integrated Master's Program in Architecture, TU Lisbon FA
Situation: Completed in Decdember 2011

Customized Housing System for Haiti   Nov. 11
Advisee: Rui Van Zeller
Role: co-Advisor*, Advisor:* Amílcar Pires
Program: TU Lisbon FA
Situation: Completed in November 2011

Kinetic Architecture: Flexible Structures   Nov. 10
Advisee: Luis Marques
Role: Advisor*, Co- Advisor:* Joaquim Jorge, INESC-ID, TU Lisbon IST
Program: Integrated Master's Program in Architecture*,* TU Lisbon IST
Situation: Completed in November 2010

Sustainable Housing Cells: mass customization of multi-family housing   Nov. 08
Advisee: Gonçalo Torres
Role: Advisor*. Co- Advisor:* Manuel C. Guedes
Program: Integrated Master's Program in Architecture, TU Lisbon IST
Situation: Completed in November 2008

Master's Theses	**A transformative grammar framework: A tool for upgrading public spaces in informal settlements in flat terrains**	Jun. 23

Advisee: Ali Baghi
*Role: Co-*Advisor*, Advisor:* Shadi Nazarian, SALA, Penn State
Program: Master of Science in Architeture, SALA, Penn State
Situation: Expected May 2023

A transformative grammar framework: A tool for upgrading public spaces in informal settlements in flat terrains   Jun. 21
Advisee: Lara Garcia
Role: Advisor.
Program: Master's in landscape architecture.
Situation: Completed in June 2021

Residential High-Rise Building Fcade: Generating Diversity   July 19
Advisee: Guo Fei
*Role: Co-*Advisor*, Advisor:* Shadi Nazarian, SALA, Penn State
Program: Master of Science in Architeture, SALA, Penn State
Situation: Completed in July 2019

Materiality and Context in Generative Design: an exploration with ceramic brick filter walls in Paraguay   June 18
Advisee: Elena Vazquez
Role: Advisor*, Co-Advisor:* Marcus Shaffer, SALA, Penn State
Program: Master of Science in Architeture, SALA, Penn State
Situation: Completed in June 2017
Note: *Distinguished Master's Thesis Award*

A new Method of Visualizing Informal Activity Pockets within the Spatial Order of Home   June 18
Advisee: Anahita Shadkam
*Role: Co-*Advisor*, Advisor:* Peter Aeschbacher, SALA, Penn State
Program: Master of Science in Architeture, SALA, Penn State
Situation: Completed in June 2017

Hidden Structure and Mechanics of Coloinial Era Urbanism   July 17
Advisee: Rohini Raghavan
Role: Co-Advisor*, Advisor:* Peter Aeschbacher, SALA, Penn State
Program: Master of Science in Architeture, SALA, Penn State
Situation: Completed in July 2017

Analysis and Evaluation of Public Spaces from Social Housing Projects in Bogotá   June 17
Advisee: Angelica Rodriguez
Role: Advisor*, Co-Advisor:* Alexandra Staub, SALA, Penn State
Program: Master of Science in Architeture, SALA, Penn State
Situation: Completed in June 2017

DESIGNA - A Shape Grammar Interpreter   Jun. 13
Advisee: Rodrigo Correia
Role: Co-Advisor*, Advisor:* António Leitão, TU Lisbon IST
Program: Master's in Computer Science, TU Lisbon IST
Situation: Completed in June 2013

Padrões urbanos: contribuição para um modelo de formulação de progamas urbanos   Feb. 10
Advisee: Nuno Montenegro
Role: Advisor
Program: Master's in Urban and Environmental Regeneration, TU Lisbon FA
Situation: Completed in July 2010

A Cultural, Customizable and Prefabricated Housing Scheme for Casablanca   May 10

Advisee: Ghita Akkar
Role: Reader*, Co-Advisores:* Terry Knight, Reinhard Goethert, MIT
Program: Master of Science in Architecture Studies, MIT
Situation: Completed in May 2010

Biology Approximations in Architecture: interpretative survey of contemporary experiments Mar. 09
Advisee: Isabel C. Neves
Role: co-Advisor. *Advisor:* Prof. Mário Kruger
Program: Master of Science in Building Construction, TU Lisbon IST
tectura*,* TU Lisbon IST
Situation: Completed in March 2009.

SP3M: Design System for Customized Wooden Housing Mar. 09
Advisee: Catarina F. Marques
Role: Advisor. *Co- Advisor:* Manuel C. Guedes
Program: Master of Science in Building Construction, TU Lisbon IST
Situation: Completed in March 2009

Design computation and fabrication: towards the integration of digital technologies in architecture Nov. 08
Advisee: Bruno Figueiredo, Lecturer, U. Minho
Role: Advisor.
Program: Master in Contemporary Architecture Culture, TU Lisbon FA
Situation: Completed in November 2008

The Designer in the Home Ceramics Industry in Portugal 1985-2000 Feb. 08
Advisee: M. João Melo
Role: co-Advisor. *Advisor:* Prof. Fernando Caria
Program: Master's in Design, FAUTL
Situation: Completed in February 2008

Design and Building Components System Applied to Mass Customized Housing May 07
Advisee: Deborah Benrós
Role: Advisor. *Co-Advisor: F.* Branco, TU Lisbon IST
Program: Master of Science in Building Construction*,* TU Lisbon IST
Situation: Completed in May de 2007
Funding: Ove Arup, London
Awards: Best paper award, CAAD Futures Conference 2007

Remote Collaboration in the Architectural Design Process Jun. 04
Advisee: Filipe Coutinho
Role: Advisor. *Co-Advisor:* Teresa Heitor
Program: Master of Science in Building Construction*,* TU Lisbon IST
Situation: Completed in June 27 2004

The Emergence of Portuguese Architecture in the European Context after the Enquire on Portuguese Vernacular Architecture Out. 04
Advisee: Maria Rita de Almeida
Role: co-Advisor. *Advisor:* Madalena C. Matos
Program: Master of Science in Building Construction*,* TU Lisbon IST
Situation: Completed in October 2004

Use of Shape Grammars for Urban Design Jun. 04
Advisee: José Nuno Beirão, Lecturer TU Lisbon FA
Role: Advisor. *Co-Advisor:* M. Teixeira
Program: Master's in Urban Design, ISCTE
Situation: Completed on June 23 2004

Audio-Visual Frameworks for Design Process Representation May 04

Advisee: Gonçalo Ducla-Soares, FCT Scholar
Role: co-Advisor. *Advisor:* W. L. Porter, MIT
Program: Master of Science in Architecture Studies, MIT
Situation: Completed in May 2004

Communication of an Architectural Project to the Construction Site: the case of the Pedagogical and Scientific Complex of the University of Aveiro *Advisee:* Francisco T. Bastos *Role:* co-Advisor. *Advisor:* M. Vicente, TU Lisbon IST *Program:* Prova de Aptidão Pedagógica (equivalent to a Masters Degre), TU Lisbon IST *Situation:* Completed in May 2004	May 04
A Prefab Box System for Housing Buildings *Advisee:* Ana L. Filipe *Role:* co-Advisor. *Advisor:* Fernando Branco, TU Lisbon IST *Program:* Master of Science in Building Construction, TU Lisbon IST *Situation:* Completed in March 2003	Mar. 04
A Web-based User-oriented Tool for Universal Kitchen Design *Advisee:* Xiaoyi Ma *Role:* co-Advisor. *Advisor:* Kent Larson, MIT *Program:* Master of Science in Architecture Studies, MIT, EUA *Situation:* Completed in September 2002	Set. 02

Doctoral Theses (advising role)	**Decrease the overhang angle of 3DCP without using formwork: Decomposition techniques for multi-directional printing** *Advisee: Nusrat Tabassum* *Role: Advisor. Co-Advisor: TBC* *Program: Doctoral Program in Architecture, SALA, Penn State* *Situation: Comprehensive Exam scheduled for Spring 2023* *Funding: SCDC*	Exp. Jun. 25
	AdaptiveToolpath generator for robotic 3D printing of concrete *Advisee: Paniz Farrokhsiar* *Role: Co-Advisor. Advisor: Benay Gursoy* *Program: Doctoral Program in Architecture, SALA, Penn State* *Situation: Comprehensive Exam scheduled for Spring 2023* *Funding: SCDC*	Exp. Jun. 24
	Improving Single-Family Housing in Islamabad (Pakistan) for Energy Efficiency *Advisee: Maryam Aman* *Role: Co-Advisor and Co-Chair. Co-Advisor: Ute Poerschke and Co-Chair* *Program: Doctoral Program in Architecture, SALA, Penn State* *Situation: Comprehensive Exam completed in Summer 2022* *Funding: SCDC*	Exp. Jun. 24
	Design for Printability and Structural Integrity of 3D Printed Concrete Structures for Housing (tentative title) *Advisee: Gonçalo Duarte* *Role: Advisor and Co-Chair. Co-Chair: Ali Memari, Department of Architectural Engineering, College of Engineering, Penn State* *Program: Doctoral Program in Architectural Engineering, Department of Architectural Engineering, College of Engineering, Penn State* *Situation: Comprehensive Exam completed on August 19, 2021* *Funding: Department of Architectural Engineering, College of Engineering, Penn State*	Exp. Jun. 23

Kinetic architecture: A performance-based approach for developing a shape-changing skin using bistable and smart materials Exp. Jun. 22

Advisee: Elena Vazquez
Role: Advisor and Chair. Committee Members: Benay Gursoy, Arch. Dept.; Clive Randal, MRI; Zoubeida Ounaies, Mat. Sci and Eng. Dept., Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed on April 8, 2022
Funding: SCDC
Awards: 2021 Rustum and Della Roy Innovation in Materials Research Award, 2020 AIA UpJohn Grant, 2020 ARCC Research Award

Evaluating the Impact of Immersive Technology on Spatial Ability Development in Beginning Architecture Students (tentative title) Exp. Jun. 22

Advisee: Eric Mainzer
Role: Co-Advisor. Advisor: Loukas Kalisperis and Chair, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Comprehensive Exam completed on May 2, 2019
Funding: SCDC
Awards: Penn State Teaching Award.

Experimental Prediction of Material Deformation and Toolpath Design Compensation in Large-Scale Additive Manufacturing of Concrete Dec. 21

Advisee: Negar Ashrafi
Role: Advisor. Co-Advisor and Chair: Shadi Nazarian, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed on December 6, 2021
Funding: Stuckeman Center for Design Computing, Penn State, Autodesk
Awards: Thomas and June Beaver Fund for industrially sponsored research

Multidisciplinary Design Optimization Framework for Multi-Phase Building Design Process Aug. 21

Advisee: Naveen Muthumanickam
Role: Co-Advisor and Co-Chair Advisor and Co-Chair: Tim Simpson, Department of Mechanical Engineering, College of Engineering, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed on August 12, 2021
Funding: Stuckeman Center for Design Computing, Penn State, NASA
Awards: Thomas and June Beaver Fund for industrially sponsored research

A Data Mining Model and a Real-Time Predictive Software Prototype for the Spatial Design and Planning of High-Energy Performance Solar Community Micro-Grids May 21

Advisee: Mina Rahiminian
Role: Advisor and Co-Chair. Co-Advisor: Lisa Iulo, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed on May 3, 2021
Awards: SCDC and Hamer Center Dissertation Award

Tapping into Urban Recycling for Low-cost Building Materials: Exploring a Craft/Digital-based Workflow for a Building System with Waste Cardboard and Wood Nov. 20

Advisee: Julio Diarte
Role: Advisor and Chair. Co-Advisor: Marcus Shaffer, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed on November 9, 2020
Funding: Fulbright
Awards: John Roe Student Sustainability Award, 2017 Penn State Graduate Exhibition 1st Place, 2020 Engineering for Change (E4C) Research Fellowship, Penn State.

Projeto baseado em Energia: Projeto Digital de Envelopes de Edifícios   Sep. 20

Advisee: Daniel Mateus
Role: Co-Advisor. Advisor: Luís Romão Faculty of Engineering, University of Porto
Program: Doctoral Program in Architecture, FA/Lisboa
Situation: Completed in September 2020
Funding: PhD Scholarship X50-0-26-0136-Y60, AUSMIP+ Programa (Grant Agreement 2010-5094/8)

A Shape Grammar for Hibridity: The domestic architecture of William Hajjar in State College, PA   Apr. 20

Advisee: Mahyar Hadighi
Role: Advisor and Chair. Co-Advisor: Loukas Kalisperis, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed in April 2020
Funding: SALA, Penn State
Award: 2018 Penn State Graduate Exhibition 1st Place

Understanding the Genesis of Form in Informal Settlements: Towards a grammar-based approach for planning favela-like settlements in steep terrains in Rio de Janeiro   Mar. 20

Advisee: Debora Verniz
Role: Advisor and Chair. Co-Advisor: Loukas Kalisperis, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed in March 2020
Funding: PhD Scholarship 207028/2014-1, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Science without Frontiers Program, Brazil, SCDC
Award: Penn State Alumni Association Dissertation Award in Arts and Humanities

Automated Multi-Material Fabrication of Buildings   Jan. 20

Advisee: Flávio Craveiro
Role: Advisor. Co-Advisor: Helena Bártolo (civil engieneer), Politechnic Institute of Leiria; Joaquim Jorge (computer scientist), IST/ULisboa.
Program: Doctoral Program in Architecture, FA/ULisboa
Situation: Completed in January 2020
Funding: PhD Scholarship SFRH/BD/105404/2014, FCT, Portugal

Managing Complexity in Mass Customization through Design Space Subdivisions: a case study in ceramic tableware design   Jun. 18

Advisee: Eduardo Castro e Costa
Role: Advisor and Chair. Committee Members: Loukas Kalisperis, Tim Simpson, Conrad Tucker, Tom Lauerman, Penn State; Joaquim Jorge, IST/Ulisboa
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed in June 2018
Funding: PhD Scholarship SFRH/BD/88040/2012, FCT, Portugal

Manifold Façades: Adaptive reuse strategies for office building conversion into housing   Apr. 17

Advisee: Camilla Guerritore
Role: Co-Advisor. Advisor: Andrea Campioli, Politecnico di Milano, Co-Advisor: Giulio Barazzetta, Politecnico di Milano
Program: Doctoral Program in Technology and Design for Environment and Building, Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano
Situation: Completed in April 2017
Funding: Mobility Exchange Program Scholarship, PhD School Council Polimi

Decoding Alberti's *De Re Aedificatoria*: a computational approach to the analysis and synthesis of classicl architecture   Feb. 16

Advisee: Bruno Figueiredo, Lecturer, U. Minho
Role: Advisor. Co-Advisor: Mário Kruger, U. Coimbra
Program: Doctoral Program in Architecture, University of Minho at Guimarães
Situation: Completed in February 2016
Funding: PhD Scholarship SFRH/BD/69910/2010, FCT, Portugal

A generic shape grammar for the generation of different housing languages
Nov. 15

Advisee: Deborah Benrós
Role: Co-Advisor. Advisor: Sean Hanna, Bartlett School
Program: Doctoral Program in Architecture, Bartlett School, University College London, UK
Situation: Qualifying exam completed in June 2010
Funding: PhD Scholarship SFRH/BD/60891/2009, FCT, Portugal

Embodied Emotions: Observations and Experiments in Architecture and Corporeality
Oct. 15

Advisee: Maria da Piedade Ferreira
Role: Advisor. Co-Advisor: Duarte Cabral de Mello
Program: Doctoral Program in Architecture, FA/Lisboa
Funding: own funding
Situation: Completed in March 2016

Computational Design Research in Architecture: The Legacy of the Hochschule für Gestaltung, Ulm
Jul. 15

Advisee: Isa Clara Neves
Role: Co-Advisor. Advisor: João Rocha, U. Évora
Program: Doctoral Program in Architecture, FA/Lisboa
Situation: Completed in July 2015
Funding: PhD Scholarship SFRH/BD/60594/2009, FCT, Portugal

Mass Customization in the Furniture Design Industry: the case of Thonet chairs
Jun. 15

Advisee: Mário Barros, Lecturer, IP Abrantes
Role: Advisor. Co-Advisor: Bruno Chaparro, IP de Castelo Branco.
Program: Doctoral Program in Design, FA/Lisboa
Situation: Completed in July 2015
Funding: PhD Scholarship SFRH/PROTEC/67509/2010, FCT, Portugal

CityPlan: Towards the development of a methodology and computational tool to support urban design
Jun. 15

Advisee: Nuno Montenegro
Role: Advisor. Co-Advisor: George Stiny, MIT
Program: Doctoral Program in Urban Design, FA/Lisboa
Situation: Completed in July 2015
Funding: PhD Scholarship SFRH/BD/45520/2008, FCT, Portugal

Shape Grammar of the Alberti's column systematization
Dec. 14

Advisee: Filipe Coutinho
Role: Co-Advisor. Advisor: Mário Kruger, U. Coimbra
Program: Doctoral Program in Architecture, University of Coimbra
Situation: Completed in December 2014
Funding: PhD Scholarship SFRH/BD/66029/2009, FCT, Portugal

Personalização da Habitação de Interesse Social no Brasil (Mass Customization of Social Housing in Brazil)
Jun. 14

Advisee: Letícia Teixeira Mendes
Role: Co-Advisor. Advisor: Gabriela Celani
Program: Doctoral Program in Architecture, Technology and City, Faculty of Civil Engineering, Architecture, and Urbanism, State University of Campinas
Situation: Completed in June 2014
Funding: PhD Scholarship CAPES, Brasil

Early design and optimization of the building envelope: Integrating architectural generative design systems and energy performance calculation

Jul. 13

Advisee: Vasco Granadeiro
Role: Advisor. Co-Advisor: João Ramôa Correia, IST/TU Lisbon
Program: MIT-Portugal Program, Sustainable Energy Systems PhD Program
Situation: Completed in July 2013
Funding: PhD Scholarship FRH/BD/43020/2008, *MIT-Portugal Program, FCT*

The life-cycle of graphic objects: the poster as a cultural resource

Jun. 13

Advisee: Sílvia Maria Rala dos Santos
Role: Co-Advisor. Advisor: Maria Calado, TU Lisbon FA.
Program: Doctoral Program in Architecture, TU Lisbon FA
Situation: Completed in June 2013
Funding: PhD Scholarship. FCT, Portugal

TetraScript: a skylight system to control light in response to internal and external conditions

Jun. 13

Advisee: Gonçalo Castro Henriques, Lecturer, ESAP
Role: Advisor. Co-Advisor: Vítor Leal, FE U Porto
Program: Doctoral Program in Architecture, TU Lisbon FA
Situation: Completed in June 2013
Funding: PhD Scholarship SFRH/BD/37467/2007, FCT, Portugal

CityMaker: Designing Grammars for Urban Design

Oct. 12

Advisee: José Nuno Beirão, Lecturer, TU Lisbon FA.
Role: Co-Advisor. Advisor: Rudy Stouffs, TU Delft
Program: Doctoral Program in Architecture, TU Delft
Situation: Completed in October 2012
Funding: PhD Scholarship SFRH/BD/39034/2007, FCT, Portugal

Methodology for the integration of Information, Communication and Automation technologies (ICAT) in Housing Rehabilitation

Apr. 12

Advisee: Sara Eloy Rodrigues, Assistente, ISCTE
Role: Advisor. Co-Advisor: Isabel Plácido, LNEC
Program: Doctoral Program in Engineering Sciences, TU Lisbon IST
Situation: Completed in April 2012
Funding: PhD Scholarship SFRH/BD/18225/2004, FCT, Portugal

Decision making in the conceptual phase of design processes: a descriptive study contributing for the strategic adequacy and overall quality of design outcomes

Jul. 10

Advisee: Rita Almendra, Lecturer, TU Lisbon FA
Role: Co-Advisor. Advisors: Moreira da Silva, TU Lisbon FA*; Henri Christians, TU Delft*
Program: Doctoral Program in Design, FAUTL
Situation: Completed in July 2010
Funding: PhD Scholarship SFRH/BD/30564/2006, FCT, Portugal

From Digital to Material: rethinking cork in architecture through the use of CAD/CAM technologies

Jun. 10

Advisee: José P. Sousa, Lecturer ESARQ/UIC, Barcelona.
Role: Advisor. Co-Advisor: Rui Baptista, TU Lisbon IST
Program: Doctoral Program in Architecture, TU Lisbon IST
Situation: Completed in June 2010
Funding: PhD Scholarship SFRH/BD/13441/2003, FCT, Portugal
Awards: Internacional FEIDAD Award 2005, 1st Prize; National NEOTEC Program 2006, Grant for creating a start up.

**Doctoral Theses
(committee role)**

TBD   Exp. Jun. 25

Advisee: Eden Yemesegen
Role: Outside field member. Advisor: Ali Memari
Program: Doctoral Program in Architectural Engineering, Department o Architectural Engineering,
College of Engineering, Penn State
Situation: Comprehensive exam completed in August 2022
Funding: SCDC

Reinforcement Methods for 3D Printing of Concrete: Evaluation,   Exp. Jun. 24
Design Innovation, and Analysis
Advisee: Zhengyu Wu
Role: Outside unit member. Advisor: Ali Memari
Program: Doctoral Program in Architectural Engineering, Department o Architectural Engineering,
College of Engineering, Penn State
Situation: Comprehensive exam completed in August 2021
Funding: SCDC

Generative Design Techniques for the Adaptive Reuse of Buildings   Exp. Jun. 24
in the Historic Centre of São Luís
Advisee: Daniele Santos Paulino
Role: Outside field member. Co-Advisors: Rebecca Napolitano, Heather Ligler
Program: Doctoral Program in Architectural Engineering, Department o Architectural Engineering,
College of Engineering, Penn State
Situation: Comprehensive exam completed in August 2022
Funding: SCDC

Who Designs the Camp? The Spatial Reproduction of Refugee   Exp. Jun. 24
Camps
Advisee: Dima Abu-Aridah
Role: Major program member. Advisor: Rebecca Henn
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Comprehensive exam completed in May 2022
Funding: SCDC

Efficacy and characterization of architects and engineers when   Exp. Jun. 23
collaborating in computational tools
Advisee: Stephanie Bunt
Role: Outside field member. Advisor: Nathan Brown
Program: Doctoral Program in Architectural Engineering, Department o Architectural Engineering,
College of Engineering, Penn State
Situation: Comprehensive exam completed in April 2022
Funding: SCDC

See-Sense-Respond: Exploring modalities of augmented robotic   Exp. Jun. 23
fabrication for automation and beyond
Advisee: Ozguc Capunaman
Role: Major program member. Advisor: Benay Gursoy
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Comprehensive exam completed in July 2021
Funding: SCDC

Mycelium-Based Bio-Composites for Architecture: A paradigm   Exp. Jun. 23
shift in architectural materials
Advisee: Ali Ghazvinian
Role: Major program member. Advisor: Benay Gursoy
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Comprehensive exam completed in April 2021
Funding: SCDC

Knit as a Material for Architectural Design: A computational methodology for developing architectural forms based on the behavior of knitted textiles Exp. Jun. 22

Advisee: Farzaneh Oghazian
Role: Major program member. Advisor: Felecia Davis
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Comprehensive exam completed in January 2020
Funding: SCDC

Wire-Bending, Computation, and Technology May 19

Advisee: Vernelle Noel
Role: Committee Chair. Advisor: Benay Gursoy, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed in May 2019
Funding: Stuckeman Center for Design Computing, Penn State

Unveiling the Wall: Identifying the physical manifestations of cultural boundaries in postmodern cities Feb. 19

Advisee: Sohrab Rahimi
Role: Committee Member. Advisor: Mallika Bose, SALA, Penn State
Program: Doctoral Program in Architecture, SALA, Penn State
Situation: Completed in February 2019
Funding: Fulbright, 2019 Penn State Alumni Association Dissertation Award.

Sustainable urban design evaluation model: design support interactivetool including spatial analysis Jun. 15

Advisee: Jorge Gil
Role: Committee member. Advisor: Vincent Nadin, TU Delft.
Program: Doctoral Program in Urban Design, TU Delft
Situation: Completed in February 2016
Funding: Bolsa de Doutoramento SFRH/BD/46709/2008, FCT, Portugal

Bionic Architecture in the 20th Century Jan. 09

Advisee: Mauro Couceiro, Assistente, ESARQ/UIC
Role: co-Advisor. Advisor: Alberto T. Estevez, ESARQ/UIC
Program: Doctoral Program in Architecture, ESARQ/UIC, Barcelona, Espanha
Situation: Completed in January 2009
Funding: PhD Scholarship SFRH/BD/8379/2002, FCT, Portugal
Awards: International FEIDAD Award 2006, Finalist

Illegal Housing in Lisbon Built from 1974 to 1980: From Descriptions to Computation Jul. 05

Advisee: Luis Romão, Assistente FAUTL
Role: Committee member. Advisor: William Mitchell, MIT
Program: Ph.D. in Architecture: Design and Computation, MIT, EUA
Situation: Completed in July 2005
Funding: PhD Scholarship, FCT, Portugal

Post-Doctoral Studies

Urban Design optimization Jan. 20 – Jun. 22

Advisee: Fernando Lima
Role: Advisor
Program: SALA, Penn State
Funding: SCDC

Additive manufacturing of concrete Jan. 19 – Jun. 20

Advisee: Maryam Hojati
Role: Advisor
Program: SALA, Penn State
Funding: SCDC

Virtual and augmented reality   Jul. 17 – Jun. 18

Advisee: Eduardo Costa
Role: Advisor
Program: SALA, Penn State
Funding: SCDC

Virtual explorer and work environment: a platform for using   Mar. 15 – Jan. 17
immersive technology for spatial context and collaboration

Advisee: Danielle Oprean
Role: Advisor
Program: SALA, Penn State
Funding: SCDC

Mathematics-aided architectural design   Mar. 15 – Jan. 16

Advisee: Krishnendra Shekhawat, Department of Mathematics, BITS Pilani,
Pilani Campus, India
Role: Advisor
Program: TU Lisbon FA
Funding: Post-Doc Scholarship, FCT, Por SFRH/BPD/102738/2014, FCT,
Portugal

Digital Drawing   Jan. 13 – Feb. 16

Advisee: António Canau, Assistant Professor, TU Lisbon FA
Role: Advisor
Program: TU Lisbon FA
Funding: own funding

Research and software development on generation, analysis   Jun. 08 – Nov. 09
and optimization methods in urban design

Advisee: Gabriela Celani, Associate Professor, State University of Campinas,
Brazil
Role: Advisor
Program: FAUTL
Funding: Post-Doc Scholarship, FAPESP, Brazil

War, Science and Architecture: from crystallography to   Oct. 08 – Mar. 09
architecture computing

Advisee: João Rocha, Assistant Professor, University of Évora
Role: Advisor
Program: The Paul Mellon Centre for Studies in British Art e Centro de
História da Arte; CHAIA, Universidade de Évora
Funding: Post-Doc Scholarship *SFRH/BPD/44363/2008, FCT, Portugal*

ACADEMIC AND SCIENTIFIC MANAGEMENT ACTIVITIES

Director, Stuckeman Center for Design Computing, Penn State University, USA.	Jan. 16 - present
Member, College of Arts and Architecture, New Dean Search Committee, Penn State.	Fall 17 – present
Member, Graduate Curricula Committee, Department of Architecture.	Fall 17 – present
Member, Graduate Affairs Committee, Department of Architecture.	Fall 16 – present
Member, Stuckeman Technology Committee, SALA, Penn State.	Fall 16 – present
Member, Arts and Entrepreneurship Committee, College of A&A, Penn State.	Fall 16 – present
Member, Distinguished Professorships Committee, College of A&A, Penn State.	Fall 16 – present
Member, Driving Digital Innovation Steering Committee, Penn State.	Fall 16 – present
Member, Research Computing and Cyberinfrastructure Committee, Human Resources Group, Penn State.	Fall 16 – present
Faculty Advisor, GRID – Penn State Graduate Researchers and Innovative Designers, Penn State.	Fall 16 – present
Vice-President Emeritus	Sep. 13 – Sep. 15
President	Sep. 11 – Sep. 13
Vice-president	Sep. 05 – Sep. 11
Member, Administrative Council, eCAADe – Education and Research in Computer Aided Architectural Design in Europe.	Sep. 04 – present
Dean, Faculty of Architecture, TU Lisbon.	Feb. 12 – Feb. 15
Member, Scientific Committee, Doctoral Program in Architecture, TU Lisbon FA.	May 09 – present
Member, Scientific Committee, Doctoral Program in Urbanism, TU Lisbon FA.	May 07 – present
Member, Scientific Council, TU Lisbon FA.	Sep. 05 – Feb. 12
Coordinator, 4th year, Integrated Master's Program in Architecture, TU Lisbon FA.	May 10 – Feb. 12 Aug. 07 – Jun. 09
Coordinator, Work group for testing the Teaching Staff Assessing Regulations.	Jul. 10 – Mar. 11
Head, CIFA – Computer Systems Center, TU Lisbon FA.	May 07 – Aug. 09
Co-coordinator (with Carlos Lameiro), Doctoral Program in Architecture, TU Lisbon FA.	Jun. 08 – Aug. 09
Secretary, Doctoral Program in Architecture Proposal. Coordination: Prof. Mário Kruger.	Nov. 06 – May 08
Head, ISTAR – IST Architecture Research Laboratories, Computational Architecture Laboratory. TU Lisbon IST.	Sep. 04 – Aug. 07
Member, Senate of the Scientific Council, TU Lisbon IST.	Sep. 04 – Sep. 06
Member, Senate of the Department of Civil Engineering and Architecture, TU Lisbon IST.	Sep. 03 – Sep. 06
Member, Coordination Committee, Department of Civil Engineering and Architecture, TU Lisbon IST.	Sep. 03 – Sep. 06

Member, Departamental Council, Department of Civil Engineering and Architecture, TU Lisbon IST.		Feb. 02 – Sep. 06
Member, Advisory Council, Program in Architecture, Department of Civil Engineering and Architecture, TU Lisbon IST.		Feb. 02 – Sep. 06
Coordinator, Architecture Division, Department of Civil Engineering and Architecture, TU Lisbon IST.		Sep. 03 – Dec. 05
Coordinator, Application to the Competition for Investment in Teaching Quality, Scientific Area of Architecture, TU Lisbon IST.		Jan. 04
Collaborator, Application of the Program in Architecture to Accreditation by the Portuguese Architectural Association. Coordination: Prof. Teresa Heitor. TU Lisbon IST.		Jul. 03
Coordinator, Web site, Program in Architecture, Department of Civil Engineering and Architecture, TU Lisbon IST.		Jun. 03
Coordinator, Application to the Competition for Scientific Infrastructures, promoted by FCT, Scientific Area of Architecture.		Mar. 01

ACADEMIC AND SCIENTIFIC EVALUATION COMMITTEES

Research Center Evaluation Boards	LEAU - Laboratório Experimental de Arquitctura e Urbanismo, Universidade Lusófona de Humanidades e Tecnologias. External evaluator.	Jan. 18
Programs Evaluation Boards	Review of the Computation and Performance Research Group, Faculty of Architecture and the Built Environment, TU Delft, The Netherlands.	Nov. 13
	Evaluation of the Doctoral Program in Architecture and Urban Studies, Pontificia Universidad Católica de Chile, Faculdad de Arquitectura, Diseño y Estudios Urbanos, Santiago, Chile. Comisión Nacional de Acreditación (CNA-Chile)	Feb. 11
Schools Evaluation Boards	Member, President's Advisory Board, School of Architecture, Carnegie-Mellon University, USA.	Feb. 14
	Comissão de Acreditação pela Ordem dos Arquitectos do Curso de Arquitectura da Universidade Lusíada de Vila Nova de Famalicão	Jun. 05
Scientific Awards	Committee member, TU Lisbon/Santander Scientific Award, responsible for the field of architecture, TU Lisbon	Sep. 09 –Sep. 11
Scholarships	Evaluation committee Member, Ph.D. and Post-Doc scholarships. Field of Architecture, Urbanism and Design, FCT, Portugal.	Jun. 09 – Jun. 13
	Evaluation committee Member, Academic Merit Scholarships, TU Lisbon FA.	Jan. 08
Research Projects Proposals	Evaluation Committee Member, Research Project Proposal, Dutch Research Council (NWO), Domain Applied and Engineering Sciences (AES).	Sep. 19
	Evaluation Committee Member, Research Project Proposal, Austrian Science Fund.	Jan. 18
	Evaluation Committee Member, Research Project Proposal, Israel Science Foundation.	Apr. 15

Research Projects Reports	Evaluation Committee Member, Final Reports of Research Projects in Architecture and Urbanism, Foundation for Science and Technology. Evaluated projects: POCI/AUR/57428/2004 and POCI/AUR/60935/ 2004.	Dec. 09
	Evaluation Committee Member, Intermediate Reports of Research Projects in Architecture and Urbanism, Foundation for Science and Technology. Evaluated projects: POCI/AUR/57428/2004 and POCI/AUR/60935/ 2004.	Dec. 08
Academic Positions Competitions	Committee Member, Internal Competition for Promotion to Principal Investigator in Architecture and Urbanism, National Laboratory for Civil Engineering, Lisbon, Portugal.	Nov. 22
	Committee Member, Public Competition for a Position of Associate Professor in the Scientific Area of Architecure/Drawing, School of Architecture, University of Porto.	Apr. 22
	Committee Member, Public Competition for a Position of Full Professor in the Scientific Area of Architecure/Drawing, School of Architecture, University of Porto.	Jun. 18
	Committee Member, Public Competition for a Position of Full Professor in the Scientific Area of Architecure/Architecural Design, School of Architecture, University of Évora.	Jun. 18
	Committee Member, Public Competition for a Position of Full Professor in in the Scientific Area of Applied Informatics and Design Theory, Department of Architecture and Construction, School of Civil Engineering, University of Campinas, Brazil.	Oct. 17
	Distinguished Professorships, College of A&A, Penn State. Role: Committee Member.	Fall 16
	Committee Member, Public Competition for a Position of Associate Professor in the Scientific Area of Architectural Technologies, ISCTE-IUL, University Institute of Lisbon.	Jun. 16
	Committee Member, Public Competition for a Position of Associate Professor in the Scientific Area of Architecure and Urbanismo, ISCTE-IUL, University Institute of Lisbon.	Jun. 16
	Committee Member, Public Competition for a Position of Full Professor in the Scientific Area of Architecure, IST, University of Lisbon.	Dec. 14
	Committee Member, Public Competition for a Position of Assistant Professor in the Scientific Area of Design, School of Architecture, University of Minho.	Sep. 13
	Committee Member, Public Competition for a Position of Assistant Professor in the Scientific Area of Drawing, Faculty of Architecture, University of Porto.	Oct. 11
	Committee Member, Public Competition for a Position of Lecturer in in the Scientific Area of Architecture, Department of Architecture and Civil Engineering, Architecture Division, IST, TU Lisbon.	Sep. 02
Tenure	Promotion and Tenure Committee, Department of Architecture. Stuckeman School of Design Computing, Penn State. Role: Committee Member.	2016-17
	Raporteur, analyses of five-year reports towards tenure of two Assistant Professors.	Jan. 11
Promotions	Promotion to *Senior Lecturer*, School of Architecture, Design and Planning, University of Sydney, Australia. External evaluator.	Apr. 20

	Promotion to *Full Professor*, Azrieli School of Architecture and Urbanism, Carleton University, Canada. External evaluator.	Jan. 20
	Promotion to *Senior Lecturer*, University of Sydney, Australia. External evaluator.	Oct. 18
	Promotion to *Professor*, University of Hawaii at Manitoba, USA. External evaluator.	Oct. 18
	Promotion to *Associate Professor without tenureship*, CMU, USA. External evaluator.	Jun. 17
	Promotion to Full Professor, Penn State, USA.	
	Promotion from the rank of Lecturer to the rank of Assistant Professor, Departament of Architecture, School of Engineering, University of Cyprus. Promotion Committee External Member.	Jun. 15
	Promotion to *Full Professor and Tenureship*, KAIST, South Korea.	Mar. 15
	Promotion to *Assistant Professor*, CMU, USA. External evaluator.	Jun. 14
	Promotion to *Full Professor*, Open University, UK. External evaluator.	Sep. 10
	Promotion to *Full Professor*, MIT, EUA. External evaluator.	Apr. 04
	Promotion to *Associate Professor*, MIT, EUA.	Apr. 00
	Promotion to *Associate Professor*, MIT, EUA.	Apr. 99

ACADEMIC AND SCIENTIFIC DEFENSE COMMITTEES

Bachelor's Thesis Defenses	*Design of commerce, offices, and housing complex for teleworkers, Jakub Děnge.* Program in Architecture, Technical Universityof the Czech Republic in Prague. Advisor: Ivan Kroupa. Role: defense committee member.	Jun. 07
	Reconversion of port storage silosinto a mixed-use building, Jana Stepkova. Program in Architecture, Technical University of the Czech Republic in Prague. Advisor: Ivan Kroupa. Role: defense committee member.	Jun. 07
	Biela: Progetto per Residenza nel Polo di Interscambio dell'Area ex Lanifici Rivetti, Andrea Vercellotti. Tese di Laurea Specislistica in Architettura, Politécnico di Milano, Facultá di Architettura, Italia. Advisor: Ernesto D'Alfonso. Role: defense committee member.	Apr. 06
Master's Thesis Proposals	*Personalização em Massa para o Projeto e a Produção de Espaços Internos Adaptativos, Raquel Leite,* Master in Architecture, Technology and City, Faculdade de Engenharia Civil, Arquitetura e Urbanismo, State University of Campinas. Advisor: Gabriela Celani. Role: Committee member.	Aug. 19
	Independent Transboundary Zone en la frontera, Yesica Guerra, Master of Science in Architecture Studies. Advisor: Julian Beinart. Role: critic.	Dec. 09
	Biomimetic Adaptation for Digital Fabrication, Sani Sharif, Master of Science in Architecture Studies. Advisor: Terry Knight.	Dec. 09
	Historiography of Japanese Modern Architecture: Works of Murano Togo, Master of Science in Architecture Studies. Norihiko Tsuneishi. Advisor: Stanford Anderson. Role: critic.	Dec. 09
	The Scale of Public, Ching, Yi Chou, Master of Science in Architecture Studies. Advisor: Julian Beinart. Role: critic.	Dec. 09
	Informed Space: Constrained Form Finding, Murat Mutlu, Master of Science in Architecture Studies. Advisor: Meijin Yoon. Role: critic.	Dec. 09
	Failure to Engage – The American Gift of a New Egyptian Museum and Research Institute at Cairo (1926), Azra Dawood, Master of Science in Architecture Studies. Advisor: Nasser Rabbat. Role: critic.	Dec. 09

	Regionalism and the Design of Building Envelopes in Low Rise Housing Architecture, Master of Science in Architecture Studies, Jay Tapia. Advisor: John Fernandez. Role: critic.	Dec. 09
	Macro-Scale Coded Assembly, Skylar Tibbits, Master of Science in Architecture Studies. Advisor: Terry Knight and Patrick Winston. Role: critic.	Dec. 09
	Superstudio: Taking the Journey from A to B, Samantha Cessarini, Master of Science in Architecture Studies. Advisor: Mark Jarzombek. Role: critic.	Dec. 09
	Claiming the Canal: Analyzing the changing role of Calcutta's Tolly Nullah, Priyanka Kapoor, Master of Science in Architecture Studies. Advisor: Julian Beinart. Role: critic.	Dec. 09
	Beyond XYZ: Reconsidering the intersection of Ecological and Digital "Space", Mark Watabe, Master of Science in Architecture Studies. Advisor: George Stiny. Role: critic.	Dec. 09
	Habitação Flexível – O caso Holandês (Flexible Housing: the Dutch case), Rita Gomes de Abreu. Master of Science in Building Construction, TU Lisbon IST. Advisor: T. Heitor. Role: committee member.	Dec. 04
	Metodologia para Selecção de Sistemas de Cobertura em Terraço com base no Custo Global (A Methodology for Selecting Terrace Covering Systems based on Global Cost), Filipe Florêncio Lopes. Master of Science in Building Construction**,** TU Lisbon IST. *Advisor: Loforte Ribeiro. Role:* committee member.	Dec. 04
	Leitura e Compreensão dos Desenhos de Construção Civil em Obra (Reading and Understanding of Construction Drawings on Site), *Filip*e Florêncio Lopes, Master of Science in Building Construction, TU Lisbon IST. Advisor: T. Heitor. Role: committee member.	Jun. 04
Integrated Master's Thesis Defenses	*O virtual sobre a realidade: Estudo de ferramenta para aumentar maquetas reais (Virtual on Reality: study of tool to augment physical models).* Fábio Costa. Integrated Master's in Architecture, ISCTE-IUL-University Institute of Lisbon. Advisors: Pedro Botelho e Sara Eloy. Role: external reviewer.	Nov. 15
	VIARmodes4BIM: Interação multimodal com informação BIM em realidade virtual imersiva (Multimodal interaction with BIM information in immersive virtual reality). Leando Alves. Integrated Master's in Architecture, ISCTE-IUL-University Institute of Lisbon. Advisors: Pedro Botelho e Sara Eloy. Role: external reviewer.	Nov. 15
	"Aging in Place": Revitalização Urbana em Braço de Prata/Marvila. Ana Marta Kong Nunes. Integrated Master's in Architecture, ULisboa FA. Advisor: Carlos Lameiro. Role: committee president.	Jul. 15
	Flexibilidade no Lugar da Indústria: Espaços para a reutilização e a adaptação. Joana Monteiro. Integrated Master's in Architecture, ULisboa FA. Advisor: Carlos Lameiro. Co-Advisor: Carlos Macedo. Role: committee president.	Mar. 15
	Espaço como Resultado da Subtracção. Mónica Brito Tavares. Integrated Master's in Architecture, TU Lisbon FA. Advisor: Fernando Bagulho. Co-Advisor: Michel Toussaint. Role: committee president.	Jan. 12
	Habitar Flexível. Ana Margarida Mesquita. Master's in Architecture, TU Lisbon FA. Advisor: Manuel Teixeira. Co-Advisor: Miguel Bastos. Role: committee president.	Jan. 12
	Projecto de um Equipamento Adaptável em Entrecampos. Nuno Salgueiro. Integrated Master's in Architecture, TU Lisbon FA. Advisor: António Lobato Santos. Role: committee president.	Dec. 11

	Espaço Público e Consciência Cívica: Equipamento Educativo e Cultural no Bairro do Alto da Cova da Moura (Public Space and Civic Awareness: Educational and Cultural equipment in Bairro do Alto da Cova da Moura). Bárbara Borges Alexandrino. Integrated Master's in Architecture, TU Lisbon FA. Advisor: Fernando Bagulho. Role: committee president.	Dec. 10
	A Flexibilidade e a Adaptabilidade do Edifício como Contributo para a Reabilitação do Bairro do Alto da Cova da Moura (Flexibility and Adaptability of the building as a Contribution to the Rehabilitation of Bairro do Alto da Cova da Moura). David Alexandre Bernardino. Integrated Master's in Architecture, TU Lisbon FA. Advisor: Fernando Bagulho. Role: committee president.	Dec. 10
	Definição de Estratégias de Gestão/Intervenção numa Perspectiva de Optimização de Análise de Custos Globais (Definition of Management Strategies / Intervention from a Perspective of Global Cost Analysis Optimization). Isabel Patrício de Castro Lousada. Integrated Master's in Architecture, TU Lisbon FA. Advisor: Pedro Lima Gaspar. Role: committee president.	Dec. 10
	Flexibilidade em Edifícios de Escritórios: análise dos vários tipos de trabalho, estratégias de ocupação e implicações de desenho (New Uses : adaptability to new uses and contemporary requirements of a typology of Primary School of the Centennial Plan). Carlos Condinho. Integrated Master's in Architecture, TU Lisbon FA. Advisor: António Lobato dos Santos. Role: committee president.	Nov. 10
	Edifícios Hospitalares: medidas de promoção da flexibilidade, versatilidade e adaptabilidade (Hospital buildings: measures to promote flexibility, versatility and adaptability). Maria Inês Mendes Trigo. Integrated Master's in Architecture, TU Lisbon FA. Advisor: Pedro Lima Gaspar. Role: committee president.	Nov. 10
	Novos Usos: adaptibilidade a novos usos e exigências contemporâneas de uma tipologia de escola primária de Plano dos Centenários (New Uses: adaptibility to new uses of a typology from the Centennial Plan), Daniela Freire. Integrated Master's in Architecture, TU Lisbon FA. Advisor: Maria Dulce Loução, Co-Advisor: Paulo de Almeida. Role: committee president.	Nov. 10
Master's Thesis Defenses (excluding own advisees)	*Personalização em série para o projeto e a produção de espaços flexíveis (Mass customization for the design and production of flexible spaces.* Raquel Magalhães Leite. Master of Architecture, Technology and City, State University of Campinas. Advisor: Gabriela Celani. Role: committee external reviewer.	Feb. 20
	Concrete Additive Manufacturing System Design for Earth and Mars. Nate Watson. Master of Science in Additive Manufacturing and Design, Penn State. Advisor: Sven Bilén and Nick Meisel. Role: committee member.	June. 22
	A Computational Design Tool for Environmentally Responsive Urban Design. Saeran Vasanthakumar. Master of Architecture, University of Waterloo. Advisor: Philip Beesley. Role: committee external reviewer.	Jun. 15
	Industrialização e Flexibilidade: Imposições evolutivas para a habitação. Master's in Product design, IPL. Advisor: Paulo Bártolo. Co-Advisor: Helena Bártolo. Role: committee president.	Jan. 12
	O sector da Cerâmica na segunda metade do século XX: Análise formal e decorativa do produto cerâmico. Lina Durão. Master's in Product design, IPL. Advisor: Paulo Bártolo. Co-Advisor: Helena Bártolo. Role: committee president.	Jan. 12
	As Tecnologias de CAD no Design de Produto: da ideias à sua materialização. Sara Filipe Gomes Garcia. Master's in Product Design, TU Lisbon FA. Advisor: José Alves Pereira. Role: committee president.	Dec. 10

A Cenografia Virtual enquanto Tecnologia e o seu Desenvolvimento e Adaptação ao meio Televisivo. Maria do Rosário Ponce de Leão. Master's in Product Design, TU Lisbon FA. Advisor: Pedro Januário. Role: committee president.	Dec. 10
Thermal Comfort Modeling, Phan Truong, Master of Science in Architecture Studies, Building Technlogy, MIT, USA. Advisor: Leon Glicksman. Role: external reviewer.	May 10
Envisioning Transbounday Cooperation Zones en la Frontera de Juárez-el Paso: How Can Border Territories be Reconfigured as Mutually Positive Dynamic Formations?, Yessica Guerra, Master of Science in Architecture Studies, Urbanism, MIT, USA. Advisor: Adèle Naudé Santos, Alan Berger. Role: external reviewer.	May 10
Animating the Adi Ganga: Analyzing the Chaning Role of Calcutta's Tolly Nullah, Prianka Kapoor, Master of Science in Architecture Studies, Urbanism, MIT, USA. Advisor: Julian Beinart. Role: external reviewer.	May 10
Generative Morphologies of Architectural Organization and Matter Force Field, Ching Yi Chou, Master of Science in Architecture Studies, Urbanism, MIT, USA. Advisor: Michael Dennis. Role: external reviewer.	May 10
Witness to the Light: The Evolution of Church Sanctuary Design & Standards Of Comfort In The Last Century In Harrison County, Iowa, Sharon Gochenour, Master of Science in Architecture Studies, MIT, USA. Advisor: Terry Knight, Christine Ortiz. Role: external reviewer.	May 10
U-Design: Toward A User-Centered Architecture, Juno Ophir, Master of Science in Architecture Studies, Design and Computation, MIT, USA. Advisor: Terry Knight. Role: external reviewer.	May 10
Reverse Engineering Nature: Design Principals For Flexible Protection Inspired By Ancient Fish Armor Of Polypteridae, Steffen Reichart, Master of Science in Architecture Studies, Design and Computation, MIT, USA. Advisor: Maryline Anderse. Role: external reviewer.	May 10
Prefab The Fablab: Rethinking The Habitability Of A Fabrication Lab ByIncluding Fixture-Based Components, Joseph Nunez, Master of Science in Architecture Studies, Design and Computation, MIT, USA. Advisor: Larry Sass. Role: external reviewer.	May 10
The Grammar of Sultanate Mosques in Bengal, Nujaba Binte Kabir, M. Phil. in Architecture, The Chinese University in Hong Kong, Hong Kong, China. Advisor: Andrew I-Kang Li. Role: external reviewer.	Jul. 09
SPM3-Sisetma Projectual para Habitação Personalizada em Madeira, Catarina Ferreira Marques. Master of Science in Building Construction, TU Lisbon IST. Advisor: José P. Duarte. Role: committee member.	Mar. 09
Desenvolvimento de Modelo Conceptual de Sistema Construtivo Industrializado Leve Destinado à Realização de Edifícios Metálicos, João Luis de Couto Castelo. Master of Science in Building Construction, Faculty of Engineering, University of Porto. Advisor: José Amorim Faria. Role: external reviewer.	Feb. 09
Displays interactivos domo ferramentas de comunicação no processo de projeto de arquitetcura, Thales Righi, Master's in Civil Engineering, Focus Area on Architecture and Construction, Faculty of Civil Engineering, Architecture and Urbanism, Unicamp, Brazil. Advisor: Gabriela Celani. Role: committee member	Feb. 09

As linguagens Compositivas de Roberto Burle Marx: aplicação e caracterização pela gramática da forma, Carlos E. Vaz, Master's in Civil Engineering, Focus Area on Architecture and Construction, Faculty of Civil Engineering, Architecture and Urbanism, Unicamp, Brazil.. Advisor: Gabriela Celani. Role: committee member.	Jan. 09
A Emergência da Arquitectura Portuguesa no Contexto Europeu no Pós-Inquérito à Arquitectura Popular em Portugal, Maria Rita de Almeida, Master of Science in Building Construction, TU Lisbon IST. Role: committee member.	Sep. 04
Reabilitação de Estuques Antigos, Hélder Coelho Cotrim, Master of Science in Building Construction, TU Lisbon IST. Advisor: Mª Rosário Veiga. Role: committee member.	May 04
Parametric Design: A paradigm Shift?, Victor Gane, Master of Science in Architecture Studies, MIT, USA. Advisor: William P. Porter. Role: *reviewer.*	May 04
Parametric Tools and Digital Fabrication for the Design of Luminous Ceilings, Rita Saad, Master of Science in Architecture Studies, MIT, USA. Advisores: Larry Sass e William P. Porter. Role: *reviewer.*	May 04
Digital Fabrication in the Architectural Design Process, Jennifer Seely, Master of Science in Architecture Studies, MIT, USA. Advisor: Larry Sass. Role: *reviewer.*	May 04
Audio-Visual Frameworks for Design Process Representation, Gonçalo Soares, Master of Science in Architecture Studies, MIT, USA. Advisor: William P. Porter e José P. Duarte. Role: *reviewer.*	May 04
Electronically Modulated Materials Effects and Context, James Tichenor, Master of Science in Architecture Studies, MIT, USA. Advisor: William P. Porter. Role: *reviewer.*	May 04
Adaptable Architecture: a computational Exploration into Responsive Desig Systems, Alejandro Zulas, Master of Science in Architecture Studies, MIT, USA. Advisor: Terry Knight. Role: *reviewer.*	May 04
Contextualizing Generative Design, Saeed Arida, Master of Science in Architecture Studies, MIT, Advisor: Terry Knight. USA. Role: *reviewer.*	May 04
Design Operators, Stylianos Dritsas, Master of Science in Architecture Studies, MIT, USA. Advisor: William P. Porter. Role: *reviewer.*	May 04
Digital Making: Exploring Design with Computer Controlled Fabrication, Sameer Kashyap, Master of Science in Architecture Studies, MIT, USA. Advisores: William P. Porter. e Larry Sass. Role: *reviewer.*	May 04
Um Sistema Modular Pré-fabricado do Tipo Caixa para Edifícios de Habitação, Ana Lúcia, Master of Science in Building Construction, TU Lisbon IST. Advisors: Fernando Branco e José P. Duarte. Role: committee member.	Mar. 04
A Comunicação de um Projecto de Arquitectura à Obra: O caso do Complexo Pedagógico e Científico da Universidade de Aveiro, Francisco Teixeira Bastos, Provas de Aptidão Pedagógica e Capacidade Científica. Advisors: Manuel Vicente e José P. Duarte. Role: committee member.	Mar. 04
A Web-based User-oriented Tool for Universal Kitchen Design, Xiaoyi Ma, Master of Science in Architecture Studies, MIT, USA. Advisor: Kent Larson e José P. Duarte. Role: *reviewer.*	Set. 02

Doctoral Thesis Proposals	*Regras do Informal: a gramática da forma da Rocinha* (Rules of the Informal: the Rocinha shape grammar), *Margaret Lica Chokyu,* Post-Graduation Program in Architecture, Doctor in Architecture, Faculty of Architecture and Urbanism, Federal University of Rio de Janeiro. Advisor: Maria Ângela. Role: committee member.	Nov. 15
	Arquitectura e Complexidade: a geometria fractal como sistema generativo (Architecture and Complexity: fractal geometry as generative system), *Maycon Sadrez,* Doctoral Program in Architecture, Technology and City, Faculty of Civil Engineering, Architecture, and Urbanism, State University of Campinas. Advisor: Gabriela Celani. Role: committee member.	Jan. 14
	Interactive Procedural Modeling in a Semi-Immersive Environment, Bruno Araújo, Doctoral Program in Information Systems and Computer Science, TU Lisbon IST. Role: committee member.	Nov. 10
	The life cycle of graphic objects: the poster as a cultural resource, Sílvia Maria Rala dos Santos, Doctoral Program in Design, TU Lisbon FA. Role: Co-advisor and committee member.	May 10
	Detection of urban heat island effects with the support of rule-based multi-scale city models, Jan Halatsch, Doctoral Program in Architecture, ETH, Doctoral Program in Architecture, ETH. Role: committee member.	May 09
	A Generative Model for Urban Design: a framework and a methodology for flexible and interactive urban design, José Nuno Beirão, Doctoral Program in Architecture, Faculty of Architecture, TU Delft. Role co-Advisor.	Sep. 08
	Excluding theses proposals for which he was advisor	
Doctoral Thesis Defenses	*A Triadic model for Conceptualizing Urban Constructs: An Analogical Conceptualization with Applications on Computer-Aided Creative Architectural Design*, Mohammed Ezzat Abdelkhalek; Doctor of Philosophy in Architecture and Urban Design, Faculty of Engineering, German University in Cairo, Egypt. Advisor: Rita Pinto De Freitas. Role: External Evaluator.	Apr. 21
	Evaluation of the Combined Effect of Vegetation and Natural Ventilation in Nearly Zero Energy Multi-Storey Buildings, Humera Mughal; Dottorato in Architettura, Arti E Pianificazione, Dipartimento di Architettura, Università degli Studi di Palermo, Italy (In cotutela con University of Lisbon, Portugal). Advisor: Roseela Corrao, José Nuno Beirão. Role: External Referee.	Jan. 20
	Conversas entre Arquitetos e Engenheiros no Ensino de Projeto (Rules of informal space: shape grammar in Rocinha), Marina Ferreira Borges; Graduate Program in Architecture, School of Architecture, Federal University Minas Gerais, Brazil. Advisor: Roberto Eustáquio dos Santos. Role: Defense Committee Member.	Sep. 19
	Structures and Types of Differentiated Street Grids: The Generation, Analysis, and Sorting of Universes of Superblock Designs, Cheng Feng; Doctoral Program in Architectural Studies, specialization in History and Theory, School of Architecture Georgia Institute of Technology, GA. Advisor: John Peponis. Role: External Examiner.	Apr. 19
	Regras do Espaço Informal: a Gramática da Forma na Rocinha (Rules of informal space: shape grammar in Rocinha), Margaret Lica Chokyu; Doctoral Program in Architectural Studies, specialization in History and Theory, Faculty of Architecture and Urbanism, Federal University of Rio de Janeiro, Brazil. Advisor: Maria Ângela Dias. Role: Defense Committee Member.	Mar. 17

Complexidade e Emergência em Estruturas Espaciais (Emergence and Complexity in Spatial Structures), André L. Araujo; Doctoral Program in Architecture, Technology and City; Faculty of Civil Engineering, Architecture, and Urban Design; University of Campinas, Brazil. Advisor: Gabriela Celani. Role: Defense Committee Member.

Jan. 17

New Computational Techniques for Detecting, Learning and Managing Criteria in Design Problems, Manuela Ruiz Montiel; Programa de Doctorado en Ingeniería del Software e Inteligencia Artificial, Departamento de Lenguajes y Ciencias de la Computación, Escuela Técnica Superior de Ingeniería Informática, Universidad de Málaga; Universidad de Málaga, Spain. Advisor: José L. Pérez de la Cruz. Role: External Evaluator.

Jun. 16

Arquitectura e Complexidade: A geometria fractal como Sistema generatico (Architecture and Compleity: fractal geometry as generative system), Maycon Sedrez; Doctoral Program in Architecture, Technology and City; Faculty of Civil Engineering, Architecture, and Urban Design; University of Campinas, Brazil. Advisor: Gabriela Celani. Role: Defense Committee Member.

Feb. 16

Rethinking the House Form in Poor Areas: Researching a pedagogical methodology to improve self-build housing in Angola by creating a culturally and ecologically sensitive Expert System, Joana Aleixo, Joint Doctoral Program, Instituto Superior Técnico, University of Lisbon, Portugal and École Polytechnique Fédéral de Lausanne, Switzerland. Advisor: M. Correia Gudes. Co-advisor: Luca Pattaroni.

Dec. 15

Os Modelos da Urbanística Moderna e a sua Influência no Urbanismo Português: Tendências para a Sustentabilidade Urbana, Carlos Almeida Marques, European Doctorate, Universidad Complutense de Madrid, Instituto Universitário de Ciencias Ambientales, España. Advisor: Ana Yabar Sterling. Co-advsior: Fernando Reis Condesso. Role: committee member.

Aug. 15

Transformação Urbana de uma Área Histórica: o Bairro Alto. Reabilitação, Identidade e Gentrification, Fabiana Pavel, Doctoral Program in Architecture, Faculty of Architecture, University of Lisbon. Advisor: Isabel Raposo. Co-advisor: Ana Pinho.

Jul. 15

A Cura e a Arquitectura, Helena Gonçalves Pinto, Doctoral Program in Architecture, Faculty of Architecture, University of Lisbon. Advisor: Maria Calado. Role: President of Defense Committee.

Jul. 15

Cidade, Arquitectura e Espaço Cénico (City, Architecture, and Scenic Space), Andreia Garcia, Doctoral Program in Architecture, Faculty of Architecture, University of Lisbon. Advisors: João Sousa Morais; co-advisor: Maria João Neto. Role: President of Defense Committee.

Jun. 15

Critical Early Inputs Towards Thermal Performance in Architectural Design of Residential Buildings in Temperate Climates – the Portuguese case, Mariana Martins Pereira, Doctoral Program in Civil Engineering, Faculty of Engineering, University of Porto. Advisor: Eduardo Oliveira Fernandes. Role: committee member.

May 15

Evolutionary Design Assistants for Architecture, Onur Sönmez, Doctoral Program in Civil Engineering, Faculty of Architecture and the Built Environment, Delft University of Technology. Advisors: Sevil Sariyildiz and A. Erdem. Role: committee independent member.

May 15

Uma Interpretação Computacional do "Re-Aedificatoria" para igrejas históricas brasileiras (A Computational Interpretation of "Re- Aedificatoria " for Brazilian historic churches), Giovana de Godoi Gonçalves, Doctoral Program in Architecture, Technology and City, Faculty of Civil Engineering, Architecture, and Urbanism, State University of Campinas. Advisor: Gabriela Celani. Role: committee member.

Feb. 15

Automated Floor Plan Generation: Generation, Simulation, and Optimization, Eugénio Rodrigues, Sustainable Energy Systems, MIT-Portugal Program, Department of Mechanical Engineering, Faculty of Science and Technology, University of Coimbra. Advisor: Adélio Gaspar, Álvaro Gomes. Role: committee member.

Jul. 14

Antropologia do Espaço e das Cidades (Anthropology of Space and the Cities), Mário José Afonso Gomes, Department of Anthropology, Faculty of Human and Social Sciences, New University of Lisbon. Advisor: José Pereira Bastos. Role: committee member.

Jul. 14

Geração Geométrica e Otimização Estrutural de Reticulados Espaciais em Aço (Geometric Generation and Structural Optimization of Steel Spatial Grid Systems Steel), Juarez Franco, Doctoral Program in Civil Engineering, Federal University of Rio de Janeiro. Advisors: Eduardo Batista, Alexandre Landesmann (co-advisor). Role: committee member.

Jul. 13

Modelação Expedita Interactiva em Ambientes Virtuais Semi-Imersivos (Direct Interactive 3D Modeling in a Semi-Immersive Enviornment), Bruno Araújo, Doctoral Program in Computer Science, TU Lisbon IST. Advisor: Joaquim Jorge. Role: committee member.

Jul. 13

Deconstrução de Edifícios: uma perspectiva arquitectónica (Building Deconstruction: an architectural perspective), António Lobato dos Santos, Doctoral Program in Enginneering Sciences, TU Lisbon IST. Advisors: Jorge de Brito, C. S. Lameiro (co-advisor). Role: committee member.

Nov. 10

O Saguão na habitação urbana: o interior da casa em torno de um vazio vertical nuclear, Nuno Arenga, Doctoral Program in Architecture, TU Lisbon FA. Advisor: Carlos Lameiro. Role: committee member.

Jun. 09

Metodologia para a estimativa da vida útil dos edifícios: aplicação ao caso dos rebocos, Doctoral Program in Enginneering Sciences, TU Lisbon IST. Advisor: Jorge de Brito. Role: committee member.

May 09

A inserção de prototipagem e fabricação digitais no processo de projeto: um novo desafio para o ensino da arquitectura, Regiane Pupo, Master's in Civil Engineering, Focus Area on Architecture and Construction, Faculty of Civil Engineering, Architecture and Urbanism, Unicamp, Brazil. Advisor: Gabriela Celani. Role: committee member.

Jan. 09

Analogías biológicas en la arquitectura: del acercamiento biónico hacia los paradigmas de lo biodigital, Mauro Couceiro, European Doctorate, Universitat Internacional de Catalunya (UIC), Escuela Técnica Superior de Arquitectura (ESARQ), Barcelona, España. Advisor: Alberto T. Estevez. Role: committee member.

Nov. 08

Illegal Housing in Lisbon Built from 1974 to 1980: From Descriptions to Computation, Luis Romão, Doctoral Program in Architecture, Departament of Architecture, MIT, USA. Advisor: W. J. Mitchell. Role: committee member.

Jul. 05

	Lógica abierta: salto(s) de escala (Espacio-tiempo-información: Composición > Posición > Disposición), Manuel Gausa, European Doctorate, Universidad Politécnica de Catalunya, Departamento de Proyectos Arquitectonicos, Programa Els nous instruments de l'arquitectura, España. Advisor: Eduard Bru. Role: committee member.	Jun. 04
	Excluding theses defenses for which he was advisor	
Habilitation Defenses	Manuel Correia Guedes, Branch: Architecture, Instituto Superior Técnico, University of Lisbon, Role: committee member	Jul. 17
	João Pedro Xavier, Branch: Architecture, School of Architecture, University of Porto, Role: committee member	Jul. 16
	Altino João Rocha, Branch: Architecture, Specialization: Theory and History of Architecture, School of Arts, University of Évora. Role: committee member.	Nov. 16
	Tânia Beisl Ramos, *Arquitecturas do Estado: um estudo comparado Portugal e Brasil (State Arrchitectures: a compararive study between Portugal and Brasil)*, Branch: Architecture, Specialization: Theory and History of Architecture, Faculty of Architecture, University of Lisbon. Role: committee member.	Feb. 16
	Paulo Tormenta Pinto, *Fundação e Arqueologia: Contexto e Discurso do Território Contemporâneo (Foundation and Archaelogy: context and discourse of the contemporary territory)*, Departament of Architecture, ISCTE-IUL-University Institute of Lisbon. Role: committee member.	Feb. 15
	José António Bandeirinha, *A Praça da Autonomia-Pedagogia, Epistemologia, Pensamento Crítico (The pedagogical autonomy square: epistemology, critical thinking)*, Department of Architecture, Faculty of Science and Technology, University of Coimbra. Role: committee member.	Abr. 14

EXHIBITIONS OF ACADEMIC AND RESEARCH WORK

A novel mixture design method of 3D printed lightweight concrete using granulated cork | 2022
Included in the International Invention and Technology Exhibition, Arena Lublin, Poland, October 20, 2022. http://innowings.pl/

From Earth to Mars and Back | 2022
Included in the collective exhibition Over and over again, HUB Gallery, July. 22, 2022 - Sept. 05, 2022. https://studentaffairs.psu.edu/hub/art-galleries/current-exhibitions

Kinetic snapping skins: Envisioning climate-adaptive environments | 2022
Lisbon Architecture Triennale Millennium bcp Universities Award, Online, Lisbon, Sept. 29, 2022 - Dec. 05, 2022. https://www.trienaldelisboa.com/news/d/news_945a7f8e-fcfb-11ec-a8f1-ac1f6bde2422

From Earth to Mars and Back | 2021
Stuckeman School of Architecture and Landscape Architecture, Penn State University, Nov. 3, 2021 - Jan. 19, 2022.

NASA 3D-Printed Mars Habitat Challenge | 2018
Czech Technical University of Prague, Faculty of Architecture, Prague, Czech Republic, Oct. 11-17, 2018

Digital Alberti: tradition and innovation in the architectural theory and practice | 2015
Exhibition of the results of the research project by the same name.
National Museum of Misericordy, Porto, Portugal, 29 Nov. 2015 – 5 Dez. 15.

Digital Alberti: tradition and innovation in the architectural theory and practice | 2014
Exhibition of the results of the research project by the same name.
National Museum of Natural History and Science, Lisbon, Portugal, 15 Nov. 2013 – 31 Jan. 14.

Digital Alberti: tradition and innovation in the architectural theory and practice | 2013
Exhibition of the results of the research project by the same name.
Sciences Museum, Coimbra, Portugal, 15 Abr. 2013 – 20 Jun. 13.

Territory: Óbidos Sustainable and creative community | 2012
Exhibition of collaborative work of students from the Integrated Master's Program in Architecture, TU Lisbon FA, and from the Master of Science in Architecture Studies, MIT, USA.
Curator: Ana Calçada; Galeria Nova Ogiva, Óbidos, Portugal, Oct. 11 – Jan 12. Organization: Óbidos Town Hall.

Post-graduate studies in Architecture and Digital Technologies | 2009
Exhibition of student work from 20 schools worldwide considered in the cutting-edge of new technologies applied to architecture, it included student work at the masterand doctoral levelsfrom TU Lisbon IST and FA.
Spot on SchoolsExhibition 2009, Curator: Paola Giaconia; Beyond Media: 10th International Festival for Arquitecture, Florence, Italy, July 2009, Curator: Marco Brizzi. Organization: University of Florence and iMage.

Des-Comp 08 exhibition | 2008
Exhibition of work in the field computation applied to architecture.

Coordinator: José P. Duarte; September 2008, Wolk Gallery, Department of Architecture, Massachusetts Institute of Technology. Curator: Junno and Kaustuv. Design: Duks. Organization: MIT Design and Computation Group.

TaxiStand: rethinking taxi service through design   2007
Exhibition of awarded and selected entries to the Taxistand competition, Lisbon Urban Information Center, Lisbon City Hall.
TaxiStandCoordinator: José P. Duarte; Internacional TáxiFestival, September 2007, CIUL –Lisbon Urban Information Center, Coordinator: José M. Viegas. Organization: Institut Pour la Ville en Mouvement.

Waterfront between Xabregas and Poço do Bispo   2007
Exhibition of student work on Urban Voids from architectural schools around the country.
Universities Exhibition, Lisbon Architectural Triennial on Urban Voids, June 2007, Curators: Ricardo Carvalho and José Adrião, Portuguese Pavillion, Lisbon, Portugal.

Towards a new curriculum on new technologies in architecture   2005
Exhibition of student work from 20 schools worldwide considered in the cutting-edge of new technologies applied to architecture, it included student work at the bachelor, master, and doctoral levelsfrom TU Lisbon IST and FA.
Spot on Schools Exhibition 2005, Curator: Paola Giconia; Beyond Media: 8th International Festival for Arquitecture, Florence, Italy, Dezembro 2005, Curator: Marco Brizzi. Organization: University of Florencd and iMage.

Urban plans and housing and public facilities solutions for rural settlements in the Caldas da Rainha county.   2005
Collective exhibition of graduating student work from TU Lisbon FA Undergrad Program in Architecture, Design Studio Level III.
Caldas da Rainha: From the Sea to the Mountains, May 2005, Caldas da Rainha Town Hall.

Urban plansand housing solutions for the northern expansion ring of the city of Caldas da Rainha   Apr. 04
Collective exhibition of graduating student work from TU Lisbon FA Undergrad Program in Architecture, Design Studio Level III.
Caldas da Rainha: Urban Laboratory, Caldas da Rainha Town Hall.

Urban restructuring of the gateway to the city of Cascais   Dec. 03
Collective exhibition of graduating student work from TU Lisbon IST Undergrad Program in Architecture, CAAD Studio.
Cascais, CascaisTown Hall, GandarinhaCultural Center, Cascais.

Freeform Ceramics   Oct. 03
Exhibition of the results of the research project by the same name.
IST Pavillion at the Forum on Competitivy, Innovation, and Qualification: Strategies, Policies, and Challenges, Lisbon Congress Center, Lisbon.

Freeform Ceramics   Sep. 03
Collective exhibition of graduating student work from TU Lisbon IST Undergrad Program in Architecture, CAAD Studio.
S*cool, Experimenta Design 2003, Lisbon Art Biennial, Lisbon.

PATENTS AND REGISTRATIONS

Registrations	Software Registration 509/05, **PAHPA Programmer**, expert system for generating descriptions of housing solutions based on the features of households according to Portuguese regulations. Author: José P. Duarte.	Jan. 05
Patents	Patent pending Brazil Provisional Application No. BR 10 2021 024435-6 filed 12.02, 2021, **Método de Avaliação de Mapa de Rua, Método de Calcular a Distribuição de Área em um Mapa de Rua, e Meio Legível por Computador** (Street Map Assessment Method, Method of Calculating Area Distribution on a Street Map, and Computer Readable Medium), Inventors: Marcela Noronha, Gabriela Celani, Jose Duarte.	Dec. 2021
	Invention Disclosure no. 2022-5374 of XXXX XX, 2022. **Material deformation compensation algorithm**, Inventors: Negar Ashrafi, José Duarte, Shadi Nazarian, Nick Meisel, Ali Memari, Aleksandra Radlińska.	Jun. 2020
	Patent pending United States Provisional Application No. 63/041,394 filed June 19, 2020, **Reinforced Composite Materials and Methods of Making the Same**, Inventors: Ali Memari, Maryam Hojati, José Duarte, Shadi Nazarian, Aleksandra Radlińska, Sven Bilén, Nick Meisel.	Jun. 2020
	Patent pending United States Provisional Application No. 63/041,351 filed June 19, 2020, **Concrete Mixture for 3D Printing**, Inventors: Ali Memari, Maryam Hojati, José Duarte, Shadi Nazarian, Aleksandra Radlińska, Sven Bilén, Nick Meisel.	Jun. 2020
	Invention Disclosure no. 2020-5121 of June 1, 2020. **Method for the Additive Manufacturing of Raised Slabs**, Inventors: Nate Watson, Sven Bilén, José Duarte, Shadi Nazarian, Ali Memari, Nick Meisel, Aleksandra Radlińska, Randall Bock.	Jun. 2020
	Invention Disclosure no. 2019-5004 of October 16, 2019. **Innovative Reinforcement for 3D Printing of Concrete**, Inventors: Ali Memari, Maryam Hojati, José Duarte, Shadi Nazarian, Aleksandra Radlińska, Sven Bilén, Nick Meisel.	Oct. 2019
	Invention Disclosure no. 2019-5003 of October 16, 2019. **Concrete Mixture for 3D Printing**, Inventors: Ali Memari, Maryam Hojati, José Duarte, Shadi Nazarian, Aleksandra Radlińska, Sven Bilén, Nick Meisel.	Oct. 2019
	Patent pending United States Provisional Application no. _ [PSU 2017-4699, 36PST92501P1, filed on November 22, 2017], **MarsCrete TM: Tailored Dry Geopolymer Binder**, Inventors: Maryam Hojati, Shadi Nazarian, Jose Duarte, Aleksandra Radlinska, Ali Memari, Sven Bilèn.	Nov. 2017
	Patent pending PT 20111000032906 of 28/04/2011, **System for Automatic Design and Manufacture of Custom Furniture**, Inventors: Mário Barros, José P. Duarte, Bruno Chaparro.	Apr. 2011
	Patent PT 103150 of 22/10/2004, **ALFF-Sistema Modular Pré-fabricado do Tipo "Caixa" para Edifícios de Habitação (ALFF-A Prefab Box System for Housing Buildings,** IST. Inventors: Ana Filipe, Fernando Branco, José P. Duarte.	Oct. 2004
	Patent pending PT 103137,21/07/2004, **Sistema de Revestimento Descontínuo de Coberturas e Fachadas de Edifícios por Peças Cerâmicas Complanares**, (Discrete Cladding System for Roofs and Façades made of Co-planar Ceramic Tiles) IST. Inventors: Daniel Mateus, Joana Peres, Raquel Ribeiro, José P. Duarte, Luisa G. Caldas.	Jul. 2004
	Patent PT 103138,21/07/2004**, Sistema de Cobertura de Edifícios** (Building Roof System),IST. Inventors: Mafalda Pacheco, André Coelho, António Damásio, José P. Duarte, Luisa G. Caldas.	Jul. 2004

Patent pending PT 103139,21/07/2004, **Revestimento Cerâmico Descontínuo de Forma Circular** (Discrete Ceramic Cladding System with a Circular Shape), IST. Inventors: Bruno Maltez, Maria Manso, Nuno Marques, José P. Duarte, Luisa G. Caldas. | Jul. 2004

Patent PT 103140,21/07/2004, **Sistema de Cobertura em Material Cerâmico**(Ceramic Roof System), IST. Inventors: João Cadaval, Ana Moreira, Karolinne Alves, José P. Duarte, Luisa G. Caldas. | Jul. 2004

Patent PT 103141,21/07/2004, **Sistema de Revestimento de Coberturas Descontínuo Cerâmico ou Vidrado** (Discrete Roof Cladding Systemin Ceramics or Glass), IST. Inventors: Mariana Parrinha, Paulo Moreno, Daniel Bernal, José P. | Jul. 2004

Patent PT 103019, **Azulejo Ceramico Rotativo** (Rotated Ceramic Tile), IST. Inventores: Silvia Preto, Mitja Novak, José P. Duarte, Luisa G. Caldas. | Sep. 2003

Patent PT 103020, **Tijolos Ceramicos Geradores de Paredes Autoportantes com Formas Complexas** (Ceramic Bricks for Making Freeform Self-supporting Walls), IST. Inventors: Tânia Sílvia, Carolina Passos, José P. Duarte, Luisa G. Caldas. | Sep. 2003

DESIGN ACTIVITY

As Freelancer   **Competitions**

<u>Space Customizer</u>   May 03
Co-author with José Nuno Beirão. Europan 7, Urban Plan and Housing Solutions for the
Morgenstond Neighborhood, The Hague, The Netherlands.

<u>Urban Weaver</u>   May 03
Co-author with José Nuno Beirão. Europan 7, Urban Plan and Housing Solutions for a
Neighborhood in Guadalajara, Spain.

<u>Morphogenesis: a process for generating urban form</u>   May 01
Co-author with João Branco Pedro. Europan 6, Urban Plan and Housing Solutions for the
San Nicolau Neighborhood, Setúbal. **Honor Mention**, **Final Selection,** included in the
official catalog and exhibition.

<u>The Dream of the factory Made House Revisited</u>   Jul. 95
Co-author with João Branco Pedro. Reconfigurable Prefab House. *International Small Home
Design Competition, Colorado State University.* **Final Selection,** included in Tremblay Jr.,
Kenneth R.; Bamford, Lawrence Von (Eds) - *Small House Designs*, Canada, 1997.

<u>Swimming Pool Building at the San Domingos Park in Benfica</u>   Nov. 90
Author. Competition organized by Lisbon City Hall. **1st prize**

Other Design Work
<u>Refurbishment of an Apartment</u>, Caldas da Rainha, 2006.

<u>Housing for Two Sectors in the Northern Expansion Plan of the City of Caldas da Rainha</u>
Co-author with José Nuno Beirão. Faculty of Architecture, TU Lisbon and Caldas da
Rainha Town Hall, 2005.

<u>Law Office</u>, Lisboa, 1994.

As Employee   **LNEC- National Laboratory for Civil Engineering**   Sep. 93 – Dec. 96
<u>Laboratory for Civil Engineering</u>, San Tomé and Prince. Preliminary design and licensing
design. Co-author withA. Reis Cabrita, 1994.

C. S. Lameiro Office   Jan. 89 – Aug. 89
<u>Ten-story housing building</u>, Monte Estoril. Preliminary design and licensing design, 1989.
Co-author withC. S. Lameiro.

M. M. Taínha Office   Sep. 88 – Aug. 91
<u>Superior School of Technology at Tomar</u>. Licensing Design, Construction Design, and
Construction Work Supervision, 1988-90. Coordinator of Hall A Design.

<u>MBA Hall</u>, Faculty of Economics, University of Lisbon. Licensing Design, 1990.
Collaborator.

<u>Competition for the Design of the Portuguese Pavillion at Expo 92</u>, Seville.Conceptual
Design, 1989. **Final Selection**. Collaborator.

<u>Competition for the Design of the Belém Cultural Center</u>, Lisboa. Conceptual Design, 1988.
3rdPrize. Collaborator.

Santa-Rita Architects Office   Sep. 87 – Aug. 88
<u>Ten-story housing building</u>, Campolide, Lisbon.Preliminary Design, Licensing
DesignandConstruction Design, 1988.Collaborator.

House at Alcainça, Licensing Design and Construction Design, 1987.Collaborator.

P. Pardal Monteiro Office   Apr. 87 – Aug. 87
<u>Department of Civil Enginnering Headquarters</u>, Instituto Superior Técnico, TU Lisbon.
Construction Design, 1987. Student Trainee.

PUBLICATIONS OF DESIGN WORK

Morphogenesis: a process for generating urban form (co-author with João Branco Pedro) in Entre Cidades: Novas Urbanidades e Dinâmicas na Arquitectura (Among Cities: New Urbanities and New Dynamics in Architecture), Europan 6, Portugal, Europan Association Portugal, November2001.

The Dream of the Factory-made House Revisited (co-author with João Branco Pedro) in Tremblay Jr., Kenneth R.; Bamford, Lawrence Von (Eds) - *Small House Designs*, Canada, 1997, *International Small Home Design Competition, Colorado State University*.

Escola Superior de Tecnologia de Tomar (collaborator, Manuel M.Tainha's Office), in Architécti 25, Ano V, Jul/Ago, 1994.

High-school at Chelas (author) in Catalog of the *3rd National Architectural Exhibition*, Portuguese Architects Association, March1992.

Modular Homes (author) in Catalog of the*1st Internacional Architectural Triennial at Sintra* on "The Home: the poetic dwelling," Portuguese Architects Association, February 1990.

EXHIBITIONS OF DESIGN WORK

High-school at Chelas	Mar. 92

3rdNational Architectural Exhibition, Portuguese Architects Association.
Selected work, published in the official catalog.

Modular Homes	Feb. 90

*1stInternacional Architectural Triennial at Sintra*on"The Home: the poetic dwelling," Portuguese Architects Association. Selected work, published in the official catalog.

ADDITIONAL INFORMATION

Languages   Portuguese (Native), English (Fluent), French (Fair), Spanish (Basic), German (Basic)

Associations	**APDSI**–Association for the Promotion and Development of the Information Society (member).	Mar. 04 – present
	eCAADe–Education and Research in Computer-Aided Architectural Design in Europe (former President).	Sep. 02 – present
	OA–Ordem dos Arquitectos (Portuguese Architects Association) (member).	Oct. 87 – present
	ACSP–Association of Collegiate Schools of Planning	Mar. 16 – present
	ACSA–Association of Collegiate Schools of Architecture	Mar. 16 – present
	Missão Possível–civic intervention group (founding member)	May 04 – May 05
	PAPS–Portuguese-American Post-Graduate Society (founding member).	Sep. 99 – Jul. 01
	PSA–Portuguese Students Association at MIT (founding member and former president).	Sep. 92 – Set. 01
	APC–Associação Portuguesa de Criatividade (member).	Oct. 87 – Jun. 95