

# CV

**Sara Codarin, M.Arch, Ph.D.**  
Assistant Professor of Architecture

## Education

- 2020 **Ph.D. Department of Architecture, University of Ferrara, Italy**  
**International Doctorate in Architecture and Urban Planning, 32 Cycle**  
Innovative Construction Systems within Building Processes. An Approach to Large-Scale Robotic Additive Layer Manufacturing Technologies
- 2019 Visiting Scholar at LTU CoAD, SP2019
- 2015 **M.Arch. Department of Architecture, University of Ferrara, Italy**
- 2013 Study abroad (Overseas Program) at BCIT, Vancouver, Canada, FA2013
- 2013 Study abroad (Erasmus Program) at ENSAP Bordeaux, France, SP2013

## Professional Licensure and Organizations

**Licensed Architect (EU)** - Section A, class LM-4, qualified to practice in the EU  
**Associate AIA** - American Institute of Architects

## Academic Appointments

- 2021 - ongoing  
**Tenure-track Assistant Professor of Architecture**  
Lawrence Technological University, College of Architecture and Design
- 2020 - 2021  
**Adjunct Faculty**  
Lawrence Technological University, College of Architecture of Design
- 2020 - 2021  
**Adjunct Faculty**  
Master's Program in Innovation Design, University of Ferrara

## Professional Experience

- 2024 - ongoing  
**p.i.o.p. / prototyping lab for offsite prefabrication**  
Co-founder / Southfield, MI, USA
- 2021 - ongoing  
**daub / design, architecture, urbanism, building**  
Collaborator / Detroit, MI, USA

- 2023 - 2024  
**D-shape / 3D construction printing**  
Member of the advisory board / Hong Kong
- 2015 - 2021  
**UNICAPI Società Cooperativa**  
Freelance collaborator / Modena, IT
- 2016 - 2017  
**Laboratorio di Architettura**  
Intern / Reggio Emilia, IT
- Municipality of Reggio Emilia**  
Project advisor / Reggio Emilia, IT

## Publications

### Books

>> *Robotics for Architecture Restoration*, single-author book submitted for Routledge, publication expected in Spring 2026

### Book Chapters

>> Invited book chapter for *Routledge Companion on Autonomous Architecture and Design*, edited by Mitra Kanaani (with Karl Daubmann and Gretchen Wilkins)

Codarin, S., **AI-informed Robotic Mark Making**, In: *Image Generation: Artificial Intelligence, Creativity and Design*. Edited by Hamza Shaikh. London: RIBA Publishing.

### Journal Articles

Codarin, S., Yoshikawa, M. (2025). **Fabricated Combines**. *Officina Journal*: Intelligens (pp.20-29). n.49/2025. Anteferma Edizioni. ISSN 2532-1218

Codarin, S. (2023). **Enhancing the Workforce in Construction: Robotic House Printing in Detroit**. *Techne Journal of Technology for Architecture and Environment*: Enabling Roles of Technology (pp.233-242). Issue 25. Year 13. FUP. ISSN: 2239-0243

Codarin, S. (2021). **The Robots Are Leaving the Cage. Imagining the Future of Construction**. *Forum A+P Journal*, vol.23/21 (pp.84-94). Polis University Press. ISSN:2227-7994

### Edited Journal Issues

Codarin, S., Giacobone, G. (2025). **Traces/Tracce**. Guest editor for the *Officina Journal* n.51/2025. Anteferma Edizioni. - *forthcoming*

Codarin, S., Giacobone, G. (2023). **Abundance/Abbondanza**. Guest editor for the *Officina Journal* n.43/2023. Anteferma Edizioni. ISSN 2532-1218

## Conference Proceedings

2025

>> Accepted abstract for presentation: *Constructing Urban Narratives through Generative AI and Game Engines* | ACSA/AIA Intersection: AI Design Practices (with Lee-Su Huang and Taka Yoshikawa)

>> Invited contribution for RIGENERA proceedings. Edited by Andrea Rinaldi, Maddalena Fortelli, Serena Foracchia.

Codarin, S., Huang, L., Yoshikawa, M. (2025). **Activating Pixels: Workflows connecting GenAI to Physical Output**. Proceedings of **SIGraDi** (Iberoamerican Society of Digital Graphics): Meta-Responsive Approaches to Architecture, Art, Design, and Sciences, FAUD-UNC, Cordoba, Argentina, November 19-21 - *proceedings forthcoming*

Codarin, S., Daubmann, K., Shall, S., Yoshikawa, M. (2025). **Collaborative Learning in Design Build Studio Culture**. Proceedings of **BTES** (Building Technology Educators' Society): Empowerment through an Architecture of Performance, Chicago Architecture Association, June 2-5 - *presented, proceedings forthcoming*

Codarin, S. (2025). **Ecological Issues as Infographics**. Proceedings of **NCBDS** (National Conference on the Beginning Design Student): Tooling, North Carolina State University College of Design, Raleigh, NC, February 27-March 2 (pp.760-766). NC State Publications Program. ISBN: 979-8-218-76638-2

Codarin, S., Yoshikawa, M. (2024). **Fabricated Combine: Animated Surface**. Proceedings of 2025 **ARCC** (Architectural Research Centers Consortium) International Conference: Emerging Challenges, technological, environmental, social, Washington DC, April 2-5, 2025 - *proceedings forthcoming*

2024

Codarin, S. (2024). **2.5-Dimensional Robotic Biopolymer Design**. Proceedings of 2024 **ACSA** (Association of Collegiate Schools of Architecture) International Conference: Inflections, Queretaro, MX, June 27-29, 2024 - *presented, proceedings forthcoming*

Codarin, S., Daubmann, K. (2024). **Labor in the Age of AI**. Proceedings of **AMPS** (Architecture Media Politics Society): Urban Futures - Cultural Pasts, Barcelona, Spain, July 15-17, 2024. ISSN 2398-9467

Codarin, S., Yoshikawa, M. (2024). **Fabricated Combines**. Proceedings of XXVIII International Conference **SIGraDi** (Iberoamerican Society of Digital Graphics): Biodigital Intelligent Systems, Barcelona, Spain, November 13 - 15, 2024 (pp. 1353-1364). UIC Barcelona. ISBN: 978-9915-9635-2-5

Codarin, S. (2024). **Prototyping and Fabrication in Design Education**. Proceedings of **NCBDS** (National Conference on the Beginning Design Student): Shared Resources, Lafayette, Louisiana, February 29 - March 2, 2024. ISBN 979-8-218-60878-1

Codarin, S., Daubmann, K. (2024). **AI-informed Field Notes for a Roman Travel Experience**. Proceedings of **ARCC/EAAE** | Architecture into the Unknown, Aarhus, Denmark, May 23-26, 2024 - *presented, proceedings forthcoming*

Codarin, S., Daubmann, K. (2024). **Humanizing VR: Foregrounding the Role of the Body in Digital Twins**. Proceedings of **EURAU**: The Role of Corporeity in the Era of Visualization, Milan, Italy, June 19-22, 2024 (pp.807-811). Milan: PUBLICA. ISBN 9788899586409

2023

Codarin, S., Daubmann, K. (2023). **Rom[AI]nterrotta**. Proceedings of **SIGraDi**: Accelerated Landscapes, Punta del Este, Uruguay, Nov 30 - Dec 1, 2023 (pp.699-710). FADU/UdelaR. ISBN: 978-9915-9635-0-1

Codarin, S. (2023). **Craft-oriented Automation**. Proceedings of **Cumulus**: Connectivity and Creativity in times of Conflict, Antwerp, Belgium, April 12-15, 2023 (pp.300-304). Cumulus the Global Association of Art and Design Education and Research. ISBN: 978-94-0149-676XX

2022

Codarin, S., Daubmann, K. (2022). **VR Gestural Modeling to Recapture the Human Body in Design**. Proceedings of **ACSA 110th Annual Meeting**: EMPOWER, Virtual Conference, May 18-20, 2022 (pp.458-465) ACSA Press. [+ Poster in the Proceedings of ARCC-EAAE 2022: Resilient City (p.789). ARCC. ISBN: 978-1-935129-31-8].

Codarin, S., Daubmann, K., Dean, K., Kutil, E. (2022). **Building in the Digital Transformation: Translations from Design to Technological-Enabled Demountable Building**. Proceedings of **ARCC-EAAE**: Resilient City, Virtual Session, May 23, 2022 (p.790). Architectural Research Centers Consortium. ISBN: 978-1-935129-31-8

2021

Codarin, S., Daubmann, K. (2021). **Robotic Fabrication in Conservation: Digital Workflows and Skills Evaluation**. Proceedings of Cultural Digital Heritage: **EuroMed**. Progress in Cultural Heritage: Documentation, Preservation, and Protection, Cyprus, Nov 2-5, 2020 (pp. 241-253). Springer. ISBN: 978-3-030-73043-7

Codarin, S., Daubmann, K. (2021). **Speculative Physical Models Created Through a Robotic Process**. Proceedings of **Cumulus**: Design Culture(s), Rome, Italy, June 8-11, 2021 (pp. 461-475). Cumulus the Global Association of Art and Design Education and Research. ISBN 978-952-64-9004-5

Codarin, S., Zaffagnini, T., Di Giulio, R. (2021). **Design Workflows and Digital Transformation: Possible Innovation Scenario for the Production of the Architectural Project**. Proceedings of **SITdA**: Design in the Digital Age. Technology, Nature, Culture - Naples, Italy, July 1-2, 2020 (pp. 311-314). Maggioli Editore. ISBN 978-88-916-4327-8

2015 - 2020 (selected publications, prior to tenure-track appointment)

Giacobone, G., Codarin, S. (2021). **Augmented Nature** / Natura Aumentata. **Officina Journal**: Ecolomy. n.33/2021 (pp.59-59). OfficinaLibri. ISSN 2532-1218

Codarin, S. et. al. (2021). **RE-IMAGINING Tor Bella Monaca**. Una Proposta per la Rigenerazione Urbana del Quartiere. **Architettura e Tecnologia per l'Abitare**.

Upcycling degli Edifici ERP di Tor Bella Monaca. Eds: Eugenio Arbizzani et. al. (pp. 166-175). Maggioli Editore. ISBN: 978-889-164-6392 [ITA]

Codarin, S. (2019). **Additive Manufacturing Technologies in Restoration: an Innovative Workflow for Interventions on Cultural Heritage**. *Cubic Journal*, Issue 6: Making (pp.32-53), Hong Kong Polytechnic University. ISBN-10: 9492852101

Codarin, S. (2019). **Digital Manufacturing and Cultural Heritage. An Experimental Workflow for the Digitization of Restoration Processes**. *Recupero e Conservazione Journal*, Issue 151 (pp.60-67). ISSN 2283-75 [ITA]

Codarin, S., Medici, M. (2018). **Definition of Innovative Material Scenarios through Additive Layer Manufacturing and Digitization Processes**. *Techne Journal* (pp.308-316). Firenze University Press (ANVUR - GEV 08 - Class A Journal). ISSN 2239-0243

Codarin, S., Medici, M. (2018). **Digitizing the Building Site for Restoration Projects: from Additive Layer Manufacturing to New Scenarios**. Proceedings of *EuroMed 2018*, Cyprus, Oct 29 - Nov 3, 2018 (pp.718- 727). Springer LNCS. ISSN 0302-9743

Codarin, S. (2018). **Architecture and Ecology**. In: *Caratteri Distributivi e Morfologici degli Edifici*. Editor: Giuseppe Saponaro. Psiche Editore. ISBN 9788894392937 [ITA]

Giacobone, G., Codarin, S. (2018). **Digital Manufacturing for Strategic Green Infrastructures**. Proceedings of *Tirana Architecture Week*, Tirana, Albania, September 20-23, 2018 (pp.611-619). Polis Press. ISBN 978-9928-4459-6-4

Codarin, S. (2018). **Digital Design and Additive Layer Manufacturing**. *Officina Journal*, 21/2018 (pp.10-11). OfficinaLibri. ISSN 2532-1218

Codarin, S. (2017). **Digital Design and Additive Manufacturing**. Proceedings of VI *Forum Proarch*. Rome (Italy), September 29-30, 2017 (pp.162-165). ProArch Society. ISBN 978 88 909054 52 [ITA]

Codarin, S. (2017). **The Conservation of Cultural Heritage in Conditions of Risk through the Use of 3D Printing**. Proceedings of *ITN-DCH Final Conference*. Olimia, Slovenia, May 23-25, 2017 (pp.239-256). Springer LNCS. ISBN 978-3-319-75825-1

Codarin, S. (2017). **3D Printing Technologies for a Biomimetic Landscape Design**. In: *Projecting Shkodra* (pp.227-232). Polis Press, Tirana. ISBN 978-9928-4459-8-8

Codarin, S., Cesari, S., and Ganassali, S. (2017). **Resilience Monitoring at the Urban and Territorial Scale**. *SITdA: Resilient Design - Future Search Conference* (pp.177-185). Maggioli Editore, Politecnica. ISBN 8891628534

Codarin, S. (2017). **3D Printing Technologies. The Application for the Valorization of Cultural Heritage**. *Recupero e Conservazione Journal*, n.141 (pp. 33-49). Maggioli Editore. ISSN 2283-7558 [ITA]

Codarin, S. et.al. (2017). **Innovative Technologies for the Recovery of the Architectural Heritage by 3D Printing Processes**. Proceedings of XXXIII Convegno Internazionale *Scienza e Beni Culturali* - Le Nuove Frontiere del Restauro. Bressanone, June 27-30, 2017 (pp.669-680). Edizioni Arcadia Ricerche. ISSN 2039-9790 [ITA]

Codarin, S. (2016). **Sustainable Urban Redevelopment of Architectural Voids** [ITA] *Architettare*, n.19 (pp. 76-81). Pacini Editore. ISSN: 2420-7756

## Invited Lectures/Presentations

- 2025 **AIA Oklahoma**  
*Collaborative Intelligence: Speculating Unknown Territory* (with Karl Daubmann), invited by Francis Wilmore, October 23
- School of Visual Arts New York City**  
*Artificial Environments* (with Karl Daubmann), invited by Carol Bentel, September 22
- AIA Michigan Design Retreat**  
*Flint House* (with Karl Daubmann), September 12
- Integrated Design Solutions**  
*Robotics, AI, and Architecture*, invited by Alessandro Sepe, July 8
- AIA New Jersey Technology in Architecture Practice**  
*Creative Practice in the Age of Intelligent Machines* (with Karl Daubmann), invited by Richard Garber, June 25
- Festival Rigenera, Reggio Emilia**  
*AI x Urban Regeneration*, invited by Andrea Rinaldi, April 12
- co.de.D Detroit**  
*Collaborative Design Practice*, invited by Chris Westerlund, April 10
- Saroki Architecture**  
*Generative Practice* (with Karl Daubmann), invited by Victor Saroki, March 25
- Materials in-FORMation seminar, UT Austin SoA**  
*Material Forms*, invited by Danelle Briscoe, February 19
- Materials Lab, UT Austin**  
*Bio-Logic*, invited by Danelle Briscoe, February 24
- KPF, New York City**  
*AI-Accelerated Creativity*, invited by Michael DeGirolamo, February 7
- ACSA Intersections, UT Austin, SoA**  
*Additive Architecture*, January 10 (peer-reviewed)
- 2024 **Italian Association of Architects, Teramo**  
*AI in Practice*, invited by Angelo Figliola, December 20
- Lodo Lab Colloquium**  
*AI Workflows*, invited by Mark Swackhamer, November 12
- AIA Michigan, ArchiFusion Symposium**  
*AI in Architecture* (with Karl Daubmann and Kurt Neiswender) invited by AIA Michigan, November 7
- International Visual Literacy Association**  
*Fragments of Italy: a photographic survey of working-class cooperative housing I in Architecture*, November 4 (peer-reviewed)

**University of Florence, Smart and Sustainable Materials seminar**  
*Material as Design*, invited by Nicoletta Setola, October 11

**DLZ company-wide retreat, Indianapolis**  
*AI design tools* (with Karl Daubmann), invited by Eric Beaulieu, August 15

**Sculpt Show&Tell, California College of the Arts**  
*Fabricated Combines* (with Taka Yoshikawa), July 13 (peer-reviewed)

**AIA National Convention, Washington DC**  
*AI sketching with rapid image generation* (with Karl Daubmann), June 6 (peer-reviewed)

**Playing Models, ETH Zurich**  
*Humanizing AI through Storytelling*, invited by Karla Saldana Ochoa, June 12

**Italian Research Day**  
*AI x Robotics x Craft Narratives*, Invited by the Consulate of Italy, May 3

**Italian Design Day**  
*The Intersection of AI and Robotics: Preserving Architectural Heritage and Craft*, invited by Consul of Italy Allegra Baistrocchi, March 14

**Feminist Spatial Practice**  
*Robotic Making*, invited by Virginia Melnyk, February 20

2023 **SDU CREATE Talk**  
*Making Digital Craft*, invited by Roberto Naboni, October 10

**DigitalFUTURES, Robotic 3D Printing in Architecture Series**  
*Crafting Conservation*, invited by Neil Leach, November 25

**University of Florence, Smart Materials and Processes seminar**  
*Making Space*, invited by Luigi Vessella, October 5

**Imagination Futures Seminar**  
*Text-to-image AI in Higher-ed*, invited by Julian Bleecker, Near Future Laboratory, August 16

**AIA Detroit Leadership Development Program**  
*AI for Rapid Ideation* (co-authored with Karl Daubmann), invited by Christopher Kelley Leadership Development Program, August 11

**DigitalFUTURES x IUAV x Venice Biennale**  
*The AI Design Revolution*, invited by Neal Leach, May 19  
Panelists: Arturo Tedeschi, Sara Codarin, Tim Fu, Chantal Matar, Roland Snooks, Neil Leach, Wanyu He, and Niccolo Casas

**Future Create Seminar**  
*AI x Architecture*, invited by Flowerista, May 17  
Podcast available on Spotify: Future Create - Il Futuro dell'Architettura [ITA]

**SAAD University of Camerino, Digito Ergo Fabrico PhD seminar**  
*Digital Materiality*, invited by Roberto Ruggiero, April 27

**DigitalFUTURES AI Series: an Introduction to AI for Designers**  
*Rom[AI]nterrotta*, invited by Neal Leach, April 1

**Sapienza University in Rome, Architecture in the Digital Age symposium**  
*Enhancing the Workforce in Design and Construction with Robotic Concrete Printing*, invited by Maura Percoco and Fabio Cutroni, February 15

2022 **Hong Kong Polytechnic University Lecture Series**  
*Craft in the Age of Robots*, invited by Daniel Elkin, October 13

**Sapienza University in Rome, Technological Imagination symposium**  
*Robotic Workflows in Design*, invited by Eugenio Arbizzani, June 30

2021 **Gravity Sketch: AROUND**  
*Design Education Rethought* (co-authored with Karl Daubmann), online keynote presentation, November 5

**Chipman Design Architecture Town Hall Lecture Series**  
*Digital Workflows for the Conservation of Cultural Heritage*, invited by Lauren Chipman, July 15

**DigitalFUTURES Doctoral Consortium Ph.D. Research Session**  
*Robotic Restoration*, peer-reviewed, June 19

2020 **Stephen Bradbury Architects Town Hall Lecture Series**  
*Automated Architecture*, invited by the firm, September 10

**DigitalFUTURES Young Session: Computational Design**  
*Digital Workflows for the Conservation of Cultural Heritage*, August 29

2019 **University of Ferrara, Department of Architecture**  
*Digital Workflows in Cultural Heritage*, Digital Transformation and New Challenges PhD seminar, invited by Theo Zaffagnini, November 20th

## Exhibitions

2025 **Venice Biennale / Invited**  
*Biennale Architettura 2025, Intelligens: Natural, Artificial, Collective*, curated by Carlo Ratti. Exhibition at the Corderie dell'Arsenale  
Project: Fabricated Combines

**Art Museum at University of Colorado Boulder / Invited**  
*Biogenic Futures: Women Shaping Material Ecologies*, curated by the Environmental Design Department Material Library  
Project: Robotically 3D Printed Biopolymers

**Milan Design Week, Isola Design District at Basic Village / Peer-reviewed**  
*Design is Human*, curated by Isola Design  
Project: Plaster Touch

**Pratt Institute, School of Architecture, Schafner Gallery** / Invited  
**Transductions: AI in Architectural Experimentation**, curated by Jason Vigneri-Beane, Olivia Vien, Stephen Slaughter, Hart Marlow  
 Project: Robotic Archaeology

**California College of the Arts, Novack Gallery** / Peer-reviewed  
**Pioneering Biomaterials Digital Exhibition** curated by Alex Schofield, Negar Kalantar, Evan Jones, Margaret Ikeda  
 Project: 2.5D Robotic Bio-Printing

2024 **1001 Woodward Avenue Gallery** / Curator  
**Detroit Month of Design**, peer-reviewed by DesignCoreDet  
 Exhibition curated with Karl Daubmann: Constructing Futures

2023 **UTLC Gallery, LTU-CoAD** / Curator  
**Detroit Month of Design**, peer-reviewed by DesignCoreDet  
 Exhibition curated with Karl Daubmann: Mobile Detroit 2050

2022 **Edsel and Eleanor Ford House in Detroit** / Invited  
**Detroit Month of Design**, curated by LTU CoAD and DesignCoreDet  
 Craft in the Digital Age

## External Grants/Funded Research

Total: \$792,000 (\$400k academic research + \$392k startup funding)

2025 - **NSF - EPIIC (\$400,000)**  
 Enabling Partnerships to Increase Innovation Capacity | LIVE: Linking Vital Ecosystems in Research and Economic Development.  
 Proposal # 2520127, Awarded August 2025.  
 PI Pedro Guillen, Co-PI Sara Codarin, Co-PI Kathryn Wrench

2024 **Next Cycle Michigan (\$250,000)**  
 p.i.o.p. / Reclaimed glass for additive manufacturing

**Centrepolis Accelerator (\$120,000)**  
 p.i.o.p. / 3D Printing equipment for large-scale additive manufacturing

**RIGENERA (\$7,000)**  
 External collaborator / AI x urban renovation workshop, in the framework of a project funded by the Italian Ministry of Culture

**Centrepolis Accelerator (\$10,000)**  
 PI / Experimental 3D printed house

**Next Cycle Michigan (\$5,000)**  
 PI / Reclaimed granite aggregate for large-scale 3D printing

## Internal Research Support

Total: \$10,000 + Graduate Research Assistance at LTU CoAD

2025	<b>LTU GRA Award</b>   Activated Pixels with Taka Yoshikawa, Lee-Su Huang	6 credits GRA
	<b>LTU GRA Award</b>   Robotics for Architectural Restoration	3 credits GRA
2024	<b>LTU GRA Award</b>   Substantiated Pixels with Taka Yoshikawa, Lee-Su Huang	3 credits GRA
	<b>LTU GRA Award</b>   Robotics for Architectural Restoration	3 credits GRA
	<b>LTU GRA Award</b>   Fabricated Combines with Taka Yoshikawa	3 credits GRA
	<b>LTU GRA Award</b>   Robotic Restoration	6 credits GRA
2023	<b>LTU GRA Award</b>   AI Narratives	3 credits GRA
	<b>LTU GRA Award</b>   Fragments of Italy	6 credits GRA
2022	<b>LTU Faculty SeedOUT Grant</b>   Robotic Clay Printing	\$ 10,000
	<b>LTU GRA</b>   Robots x Higher-Ed	3 credits GRA
	<b>LTU Course Improvement Grant</b>   ProtoFab workshop	\$ 250

## Awards/Recognitions

2025	<b>LTU Researcher of the Year</b> Lawrence Technological University
2024	<b>Named Ambassador for the Italian Design Day</b> Consulate of Italy in Detroit
2022	<b>Crain's Notable Women in Design and Construction Award</b> Crain's Detroit Business
2020	<b>Honorable Mention for a Design Competition Entry</b> SITdA - Society of Technology of Architecture
2018	<b>Best paper award - Techne journal</b> SITdA - Society of Technology of Architecture

# Workshops

- 2025 **Detroit Institute of Arts**  
**Designing with Intelligence: an AI Collection of Speculative Objects**  
LTU CoAD x Detroit Month of Design, July 23 and August 21 (peer-reviewed)
- 2025 **University of Texas at Austin**  
**Material inFORMation**, March 24-28 (invited)
- 2023 **Sigradi Accelerated Landscapes**  
**Labor in the Age of AI**, Nov 20-25 (peer-reviewed)
- 2022 **ACADIA Hybrids & Haecceities**  
**Robotic Mark Making**, Oct 24-26 (peer-reviewed)
- DigitalFUTURES**  
**Robotic Mark Making**, June 27 - July 1 (peer-reviewed)  
LTU CoAD exhibition: 3rd Level Gallery  
Metaverse exhibition: <https://cube.topopixel.com/2021>
- 2021 **DigitalFUTURES - Doctoral Consortium**  
**Robo-Augmented Workflows**, June 27 - July 2 (peer-reviewed)
- 2019 **Polis University in Tirana**  
**Tessellation**, June 13-22

# Teaching

## Coordinator (LTU-CoAD)

FA2022 - recurring

### **ARC2116 | Integrated Design Studio 1 + Lab**

Co-instructors: Mark Farlow, Margaret Wong, John Hilla, Ed Villamor, Laurin Aman  
Content: architecture and site / study of precedents / observation of environmental forces  
Enrollment: 65-70 (lab), 12-15 (studio)

SP2021 - recurring

### **ARC6003(3993) | Rome-ing Around**

Co-instructor: Karl Daubmann  
Content: text-to-image AI / international travel experience / notations / AI sketchbook  
Enrollment: 20-25

SP2021-24

### **ARC3823 | Prototyping and Fabrication**

Co-instructors: Pandush Gaqi, Rasha Shkoukani, Chris Westerlund  
Content: robotic fabrication / CNC routing / 3D printing / digital fabrication workflows  
Enrollment: 85-90

FA2021-24

### **ARC2813 | Information Modeling and Simulation**

Co-instructors: Eric Ward, Lauren Pedigo, Pandush Gaqi  
Content: algorithms-aided design / parametric design / Rhino + Grasshopper / digital workflows  
Enrollment: 80-90

## Instructor / Co-instructor (LTU-CoAD)

- SU25 **ARC 4993 | 5883 | Conjoining Worlds**  
Co-instructors: Masataka Yoshokawa, Lee-Su Huang  
Content: generative AI / storytelling / speculative urban scenarios  
Enrollment: 14
- SP25 **ARC5824 | Advanced Design Studio 2**  
Co-instructor: coordinated studio with parallel sections  
Content: generative AI / storytelling / future of collective living  
Enrollment: 11
- SU23 **DES5993(4993) | Labor in the Age of AI**  
Co-instructor: Karl Daubmann  
Content: generative AI / storytelling / ethnographic studies / human labor  
Enrollment: 23
- SP21-  
SP22 **ARC5423 | Ecological Issues**  
Content: global ecologies / antropocene / built environments / climate forces  
Enrollment: 70-80
- FA21 **ARC5034 | Architectural Foundation Studio 3**  
Co-instructor: Mark Farlow  
Content: design studio / architecture renovation / adaptive reuse / industrial archaeology  
Enrollment: 35
- SU21 **DES3993 | ARC6883 | Digital Bodies/Digital Twins**  
Co-instructor: Karl Daubmann  
Content: VR / immersive co-creation / subD modeling / Gravity Sketch / bodily studies  
Enrollment: 25
- SU20 **ARC5804 | Design Build Studio**  
Co-instructors: Karl Daubmann, Kristen Dean, and Emily Kutil  
Content: temporary pavilion / design build / fabrication and construction  
Enrollment: 50-60
- SP19 **ARC5202(3213) | Introduction to Digital (robo) Fabrication**  
Co-instructor: Karl Daubmann  
Content: robotic fabrication / algorithms-aided design / speculative model making  
Enrollment: 10

## Adjunct faculty (University of Ferrara)

- FA20 **Smart Technologies for Sustainable Design Studio**  
Co-instructors: Andrea Spaggiari, Emilio Antinori, Michele Bottarelli, and Roberto Vezzani  
Content: product design / service design / smart interfaces / sustainable design  
Enrollment: 17
- FA17 **Design and Construction Studio 1 - Lab**  
Course title in Italian: Laboratorio di Costruzione dell'Architettura 1  
Content: architectural design / construction technology / DD drawings / cost evaluation.  
Level: undergraduate second year studio  
Credits: 11  
Enrollment: 45

# Guest Critic Invitations

## Final reviews / juries at other institutions

- SP25 **IAAC Macad** / Generative Ai virtual pinup  
Invited by James McBennett  
**University of Michigan, TCAUP** / Thesis  
Invited by Claudia Wigger and Craig Borum
- FA24 **University of Texas at Austin** / Final reviews at the School of Architecture  
Invited by Danelle Briscoe  
**Florida Atlantic University** / Final reviews at the School of Architecture  
Invited by Joseph Choma
- SP24 **BSU Department of Architecture** / Thesis  
Invited by Zachariah Michielli
- FA23 **UPenn Weitzman School of Design** / MSD-RAS Material Agencies  
Invited by Andrew Saunders
- FA23 **Mississippi State, SoA** / Studio 4  
Invited by Duane McLemore
- SP23 **UPenn Weitzman School of Design** / MArch Schenk Woodman Prize  
Invited by Andrew Saunders
- SP23 **Carnegie Mellon SoA** / Praxis 2  
Invited by Azadeh Sawyer
- SP23 **BSU Department of Architecture** / MKM third-year Design Competition  
Invited by Timothy Gray
- FA22 **University of Michigan, TCAUP** / Robotic Engagement and Material Processes  
Invited by Wes McGee
- FA22 **Mississippi State, SoA** / Craft Traditions and Adv Fabrication  
Invited by Duane McLemore
- FA22 **Texas Tech-CoAD** / Inclusive Automation and Craftable Realities  
Invited by Sina Mostafavi
- SP22 **Roger Williams SoA** / Thesis  
Invited by Andrew Cohen
- SU21 **University of Michigan, TCAUP** / Digital and Material Technologies Practicum  
Invited by Catie Newell
- SP19 **Toronto Metropolitan University** / Robotic Formwork, Casting Surfaces  
Invited by Jonathon Anderson

## Featured Work/Media Coverage

- 2025 **Tracing Architecture Podcast**  
*AI&Architecture*, April 22
- 2024 **365ArtPlus Magazine**  
*Restoration in the Age of Robots*, Issue 68 - Architect 2
- Daily Detroit Podcast**  
*What Is The Best Use For 3D Printed Homes?*, October 30

## DBusiness Magazine

*Italian Design Day Celebrated in Detroit with Focus on AI, Robotics, and Innovation*, March 19

## Innovative Real Estate with Three Squared Inc Podcast

*The Role Robotics Plays in Architecture*, May 29

## 2023 **debrief.city**

*Architects Will Coexist With Artificial Intelligence, Remaining Humanists [ITA]* / Gli architetti convivranno con l'IA, restando "umanisti", May 26

## Future Create Podcast

*The Future of Architecture [ITA]*

## 2022 **Cultured Magazine**

*Detroit Celebrates Its Renaissance During Design Month*

Work mentioned: robotically fabricated drawings showcased at the Ford House for the exhibition *Craft in the Digital Age*, 2022 DMOD, Sept 27

## Academic Service

### University Service

2023 - ongoing

#### Member of Faculty Senate

2024 **LTU Research Day**, April 21

> Research Poster: Fabricated Combines

> Research Poster: Robotic Fabrication-to-AI-renderings

2023 **LTU Research Day**, April 21

> Research Poster: Fragments of Italy

> Research Poster: Robotic Mark Making

> Research Poster: Robotic Clay Printing

(Awarded Best Faculty Research Poster)

> Research Poster: Architecture Restoration in the Age of Robots

#### Panelist

> AI and the Future of Education organized by CoAS, April 6

### College Service

2022 **Member of the Lectures and Exhibitions Committee**

### Department Service

2025 **Chair of the Architecture Search Committee**

2024 **Member of the Architecture Search Committee**

2023 **Member of the Architecture Search Committee**

#### Lecture for the welcome-back week

> Title: AI Image generation, Aug 15

## 2022 Guest Lecture

- > Course: Architectural Foundation Studio 2
- > Lecture: Designery Research Workflows, January 24

2022 - 2023

### Master thesis content expert

2022 - recurring

### Undergraduate Student Advisor

2019 - recurring

### Undergraduate and graduate final reviews at LTU - CoAD

Thesis  
Intro to Design  
(Intro to) Visual Communication  
Integrated Design Studio 1-2-4-5  
Architectural Foundation Studio 1-2-3  
Advanced Design Studio 1-2  
BIM Programming and Prototyping  
Simulation and Prototyping  
Prototyping and Fabrication

## Other institutions / organizations

2022 - ongoing

### Officina Journal

Member of the scientific committee / journal affiliated with IUAV Venice

2024 University of Southern Denmark (SDU)

Member of the Architecture Search Committee

2023 University of Southern Denmark (SDU)

Member of the Architecture Search Committee

### Nuova Accademia di Belle Arti (NABA), Milan

- > QS Ranking evaluator

### Member of the DigitalFUTURES Consortium

- > Moderated talk: New Hybridities/Nuove Ibridazioni, February 17
- > Moderated talk: Startup x Technology / Startup x Tecnologia, May 26

### Conference session chair

Cumulus Antwerp Conference. Track: Redefining the role of design(ers)

2021 Guest Speaker

- > Webinar held by Education Dynamics: Pandemic Impact on the Future of the Architecture Profession
- > Title: Rallying Innovation in the Future of Construction, June 24

2020 Member of the evaluation committee for the Master Thesis dissertations

Master's Course in Innovation Design, University of Ferrara, November 19

2019 Organization of the symposium: Digital Transformation and New Challenges

Department of Architecture, University of Ferrara, November 25  
Invited keynote speakers: Mario Carpo, Karl Daubmann, and Lauren Vasey

## Paper reviewer

2025 ACADIA Computing for Resilience

ACSA/AIA Intersections Conference - AI Design Practices

2024 NCBDS40 National Conference - Tool(ing)

ACSA/AIA Intersections Conference - New Housing Paradigms

ACSA National Conference - Repair

ACSA International Conference - Inflections

ARCC/EAAE International Conference - Architecture into the Unknown

DigitalFUTURES International Conference - Symbiotic Intelligence

Sigradi International Conference - Biodigital Intelligent Systems

2023 ACSA National Conference - Disrupter on the Edge

ARCC National Conference - The Research-Design Interface

Cumulus Antwerp Conference - Digital futures/Hybrid reality

DigitalFUTURES Conference - Phygital Intelligence

2022 ACSA 110th Annual Conference - EMPOWER

TAD Journal

Cumulus Rome Conference - Design Culture(s)

2021 JOCCH - Journal on Computing and Cultural Heritage

## Social Media

IG @saracodarin  
@coad\_robotfab  
@constructingfutures\_ai  
@protolabdesign

## Website

<https://www.saracodarin.com/>

