OLGA MESA, LEED AP

nuvolastudio.org

om@nuvolastudio.org | 310.254.6700 | 2 Lake Avenue, Barrington, RI 02806

EDUCATION

2015 Harvard Graduate School of Design, Cambridge, Massachusetts

Masters in Design Studies (MDes) Concentration: Technology

Graduated with Distinction

Recipient of Daniel L. Schodek for Technology and Sustainability Award for thesis titled:

"Anima: Choreographed Matter"

2000 Rhode Island School of Design, Providence, Rhode Island

Bachelor of Architecture

Recipient of AIA Henry Adams Gold Medal for Excellence in Design

TEACHING EXPERIENCE

2024 - Roger Williams University (RWU), Bristol, Rhode Island

2017 Associate Professor, Faculty School of Architecture and Historic Preservation (SAAHP)

"ARCH 214: Architectural Design Core Studio IV" - 5 credit Undergraduate Core Studio

2019 - 2023 Coordinator. 2017 & 2018 Co-coordinator with Ginette Wessel

2023 - Roger Williams University (RWU), Bristol, Rhode Island

2018 Associate Professor, Faculty School of Architecture and Historic Preservation (SAAHP)

"ARCH 588: Advanced Graduate Digital Manufacturing Seminar" - 3 credit Graduate Elective

2022 - Roger Williams University (RWU), Bristol, Rhode Island

2020 Associate Professor, Faculty School of Architecture and Historic Preservation (SAAHP)

"ARCH 282_II: Architectural Analysis" - 3 credit Undergraduate Core Course

Coordinator

2020 Roger Williams University (RWU), Bristol, Rhode Island

Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)

"ARCH 515: Performance²: Dynamic Skins" - 5 credit Architectural Advanced Graduate Design Studio.

Co-taught with Nathan Fash

2019 Roger Williams University (RWU), Bristol, Rhode Island

Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)

"ARCH 515: Tourism and Habitat Regeneration"- 5-credit Architectural Advanced Graduate Design Studio.

Co-taught with Nathan Fash

2019 Roger Williams University (RWU), Bristol, Rhode Island

Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)

"ARCH 430/530.01: Macro Seminar: Designing Ecology"- 3 credit Graduate Elective.

Co-taught with Nathan Fash

2023 -	Roger Williams University (RWU), Bristol, Rhode Island
2018	Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)
	"ARCH 588: Advanced Graduate Digital Manufacturing Seminar" - 3 credit Graduate Elective
2019 -	Roger Williams University (RWU), Bristol, Rhode Island
2017	Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)
	"ARCH 587: Advanced Graduate Computer Applications Seminar" - 3 credit Graduate Elective
2018	Roger Williams University (RWU), Bristol, Rhode Island
	Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)
	"ARCH 515: Redressing Wastelands." - 5 credit Architectural Advanced Graduate Design Studio.
2017 -	Roger Williams University (RWU), Bristol, Rhode Island
2016	Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)
	"ARCH 287: Introduction to Computer Applications" - 3 credit Undergraduate Core Course
2017	Roger Williams University (RWU), Bristol, Rhode Island
	Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)
	"ARCH 413: Makers Space: Designing for hackers, makers and breakers"- 5 credit Architectural Advanced
	Undergraduate Design Studio
2016	Roger Williams University (RWU), Bristol, Rhode Island
	Assistant Professor, Faculty School of Architecture and Historic Preservation (SAAHP)
	"ARCH 515: Geometric and Material Gradients in Architecture" - 5 credit Architectural Advanced
	Graduate Design Studio
2016	Northeastern University (NEU), Boston, Massachusetts
	Studio Instructor, Faculty Department of Architecture
	"Comprehensive Studio" - 6 credit Advanced Studio
2016	Rhode Island School of Design (RISD), Providence, Rhode Island
	Studio Instructor, Faculty Department of Architecture
	"Clay in Context: Tecne in Architecture" - 3 credit Graduate and Undergraduate Advanced Studio
2015	Northeastern University (NEU), Boston, Massachusetts
	Lecturer, Faculty Department of Architecture
	"Introduction to Building Systems"- 3 credit Undergraduate Seminar
2015	Rhode Island School of Design (RISD), Providence, Rhode Island
	Studio Instructor, Faculty Department of Architecture
	"Making of Design Principles" - 6 credit Core Graduate and Undergraduate Design Studio
2015	Building Local Organization (BL), Quindío, Colombia
	Invited Studio Instructor and Lecturer
	"Building with Bamboo in Quindío" - Design-Build Workshop

2014	Rhode Island School of Design (RISD), Providence, Rhode Island Studio co-instructor and Lecturer, Faculty Department of Architecture
	"Future Health Systems" - 6 credit Advanced Graduate and Undergraduate Design Studio
2013	Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts
	Studio Instructor and Lecturer, Faculty Department of Architecture
	"4.113 Architectural Design"- 6 credit Core Design Studio
2012	Rhode Island School of Design (RISD), Providence, Rhode Island
	Studio Instructor and Lecturer, Faculty Department of Architecture
	"Habitat and Construction in Pile" - 6 credit Advanced Graduate and Undergraduate Design-Built Studio
2012	Universidad Tecnológica Equinoccial (UTE), Quito, Ecuador
	Studio Instructor and Lecturer, Department of Architecture
	"Instrument Installations with Recycled Material" - Design-Build Workshop at Architecture Biennale
2011	Rhode Island School of Design (RISD), Providence, Rhode Island
	Studio Instructor and Lecturer, Faculty Department of Architecture
	"Habitat and Construction in Selva Viva"- 6 credit Advanced Graduate and Undergraduate Design-Build Studio
2010	Northeastern University (NEU), Boston, Massachusetts
	Studio Instructor and Lecturer, Faculty Department of Architecture
	"Advanced Digital Representation" - 3 credit Advanced Design Studio
2008 -	Rhode Island School of Design (RISD), Providence, Rhode Island
2007	2008 Coordinator of Making Design Principles Studio and Studio Instructor
	2007 Co-coordinator of Making Design Principles Studio with Kyna Leski "Making Design Principles" -
	6 credit Core Graduate and Undergraduate Design Studio
2007 -	Rhode Island School of Design (RISD), Providence, Rhode Island
2011	Studio Instructor, Faculty Department of Architecture
	"Architectural Design" - 6 credit Core Graduate and Undergraduate Design Studio
2006 -	Rhode Island School of Design (RISD), Providence, Rhode Island
2013	Studio Instructor, Faculty Department of Architecture
	"Making of Design Principles" - 6 credit Core Design Studio
2006 -	Rhode Island School of Design (RISD), Providence, Rhode Island
2016	Degree Project Second Adviser, Faculty Department of Architecture
2006 -	Visiting critic at Cornell University, Massachusetts Institute of Technology (MIT), Harvard University
Present	Graduate School of Design (GSD), Yale School of Architecture, Washington University in St. Louis
	(WashU), Rhode Island School of Design (RISD), Northeastern University (NEU), University of
	California, Los Angeles (UCLA), Roger Williams University (RWU) and Otis College of Art and Design.

PROFESSIONAL EXPERIENCE

2023 - Present Nuvola Studio, Inc 501 (c)3, Somerville, Massachusetts

Co-founding Principal

Designed collaboratively a series of research and community-based projects such as Comfort Kitchen Patios, Boston, USA; Gemela Project, Copán Ruinas, Honduras; Chuspata Weaver Market, Ihuatzio, México; Pacífico Water Harvesting Pavilion, Bahía Málaga, Colombia.

2016 - 2022 **2Story Design Build,** Providence, Rhode Island

Principal

Lead a series of residential and commercial projects from schematic design through construction administration.

2014 - Present Harvard Graduate School of Design, Cambridge, Massachusetts

Material and Performance Systems Group (MaPs)

Research Associate / Consultant

Research on material systems, processes and performance of compliant composite structures and buckling structures and design of architectural applications using these materials. Research is conducted in collaboration with the Wyss Institute for Biologically Inspired Engineering.

2014 - 2016 Harvard Graduate School of Design, Cambridge, Massachusetts

Responsive Environments and Artifacts Lab (REAL)

Research Associate

Research on material processes and performance of buckling structures. Study and design of potential applications into architectural components.

2012 - 2013 **Gensler Architecture**, Boston, Massachusetts

Project Manager and Project Designer

Worked on a series of commercial projects from schematic design through construction documents including: One Federal Lobby and Quest Diagnostics Laboratory.

2007 – 2012 **3six0 Architecture**, Providence, Rhode Island

Associate / Project Designer and Project Architect

Lead residential and commercial projects from schematic design through construction administration, including: Stone House Inn Restaurant and Spa, Paschke Danskin Residence and Wildflour Café. Worked on competitions such as: 2012 Yeosu Pavilion, Polish History Museum, and Atlanta History Center.

2006 – 2007 Friedrich St. Florian Architects, Providence, Rhode Island

Project Designer

Lead schematic design and design development for the College Hill Residence. Work on the winning entry for the America's Cup Hall of Fame Exhibition and Education Center Competition.

2004 – 2006 Lorcan O'herlihy Architects, Culver City, California

Project Designer and Project Architect

Lead residential and mixed-use projects including: Artisan Multifamily Housing, Norton Multifamily Housing, Pritchett Residence and Stuart Residence.

2000 – 2004 Gensler Architecture, Design and Planning Worldwide, Santa Monica, California

Project Designer and Project Manager in the "Building and Campuses Group"

Lead the design and construction administration of the USC Law School Café, Biola University School of Theology and Warner Bros. Studios. Junior Designer and Job Captain for the San Pedro Apartments and 2000 Avenue of the Stars. Responsibilities covered all phases of the design process for institutional and interior projects including client management, code analysis, schematic design, consultant coordination.

PUBLICATIONS

2022 17th Advanced Building Skins Conference and Expo (ABS)

Mesa, O., & Fash, N. (2022). Skin as Habitat: Performance through species integration, 17th Advanced Building Skin Conference & Expo 20-21 October 2021, Bern, Switzerland, Proceedings 2022, Advanced Building Skins GmbH, pages 296 - 305, ISBN 978-3-9524883-3-1

Chairs: Nathan Fash and Olga Mesa Session: Living Building Skins Session

2021 16th Advanced Building Skins Conference and Expo (ABS)

Mesa, O., & Fash, N. (2021). Performance2: Responsive and Adaptive Building Skins, 16th Advanced Building Skin Conference & Expo 21-22 October 2021, Bern, Switzerland, Proceedings 2021, Advanced Building Skins GmbH, pages 432 - 439, ISBN 978-3-9524883-6-2

Chair: Olga Mesa. Session:

2020 IJAC Article

Mesa, Olga, Mhatre, Saurabh, & Aukes, Dan. (2020). CREASE: Synchronous gait by minimizing actuation through folded geometry. International Journal of Architectural Computing, 18(4), 385-403.

2020 **2020 Sociedad Iberoamericana de Gráfica Digital (SIGraDi)**

Mesa, Olga. "Choreographed Matter". Proceeding of 24rd SIGraDi Conference – Transformative Design. Medellín, Colombia, Nov 18- 20, 2020.

2020 International Conference on Architecture and Built Environment (S.ARCH)

Mesa, Olga, Fash, Nathan: "Designing ecology: collaborative teaching and practice" in Proceedings of the 7th International Conference on Architecture and Built Environment with Architecture Awards 2020 S.ARCH Conference.

2020 38th Education and research in Computer Aided Architectural Design in Europe (eCAADe)

Mesa, O., Mhatre, S., & Bechthold, M. "Woven Compliant Composites" in Proceedings of Education and Research in Computer Aided Architectural Design (eCAADe): Anthropologic. T.U Berlin, Sept 16-17, 2020

2019 **2019 37th Education and research in Computer Aided Architectural Design in Europe (eCAADe) and**23rd Sociedad Iberoamericana de Gráfica Digital (SIGraDi)

Mesa, Olga, Mhatre, Saurabh, Singh, Malika and Dan Aukes: "CREASE: Synchronized Gait Through Folded Geometry" in Proceedings of the 37th eCAADe and 23rd SIGraDi Conference (Architecture in the Age of the 4th Industrial Revolution) – Volume 3, University of Porto, Porto, Portugal, 11-13 September 2019, pp. 197-206

2019 **2019 11th Wyss Institute Retreat**

Mesa O., Mhatre S., Bechthold M. "Inclined Kinematics Auxetics" [Abstract] 11th Wyss Institute Retreat Book of Abstracts, 2019, pp. 12.

2019 **2019 11th Wyss Institute Retreat**

Mhatre S., Mesa O., Fernandes M., Bertoldi K., Bechthold M. "Inclined Buckling Auxetics" [Abstract] 11th Wyss Institute Retreat Book of Abstracts, 2019, pp. 12.

2018 IASS International Association for Shell and Associated Structures

Seibold, Z., Mesa, O., Stavric, M., Bechthold, M.: *Ceramic Tectonics: Tile Grid Shell* – Proceeding of the IASS Symposium 2018, Boston, MA July 16-20, 2018. *Forthcoming*.

2017 ACADIA Association for Computer Aided Design in Architecture at Massachusetts Institute of Technology (MIT)

Mesa, O., Mhatre, S., Stavric, M., Norman, S., Grinham. J., Sayegh, A., and Bechthold, M.: "Non-Linear Matters: Auxetic Surfaces" in Proceedings of ACADIA, 2017, pp. 392 – 403

2015 **2015 National Council of Education on Ceramic Arts (NCECA)**

Vroman, R., King, N., King, K., Mesa, O. "Innovating Ceramics: Collaboration, Technology, and Pedagogy" NCECA Publishing, 2015

2014 **2014** RoboArch: Robotic Fabrication in Architecture, Art and Design Research

Friedman, J., Kim, H., and Mesa, O. "Experiments in Additive Clay Depositions." Robotic Fabrication in Architecture, Art and Design 2014. Springer International Publishing, 2014. 261-272.

AWARDS

2023 Roger Williams University

-2018 Foundation to Promote Scholarship and Teaching Grant

2015 Harvard Graduate School of Design

Daniel L. Schodek Award Recipient for Technology and Sustainability

Thesis: "Anima: Choreographed Matter"

2014 Harvard School of Engineering and Applied Sciences Travel Grant

Global Health Institute ArtScience Prize Fellowship

Research project: "Hydrajel".

2011 AIA Rhode Island, Design Awards, Honor Award given to 3six0 Architecture

Wildflour Vegan Bakery and Juice Bar

2011 AlA Rhode Island, Design Awards, Honor Award given to 3six0 Architecture

Paschke Danskin Loft

2011 AIA Rhode Island, Design Awards, Honor Award given to 3six0 Architecture

Pettaquamscutt River Residence

2011	Rhode Island Monthly, Design Awards, Silver Medal Wildflour given to 3six0 Architecture Vegan Bakery and Juice Bar by 3six0 Architecture
2011	Rhode Island Monthly, Design Awards, Gold Medal given to 3six0 Architecture Paschke Danskin Loft by 3six0 Architecture
2011	Rhode Island Monthly, Design Awards, Gold Medal given to 3six0 Architecture Pettaquamscutt River Residence
2011	Rhode Island Monthly, Design Awards, Silver Medal given to 3six0 Architecture Paschke Danskin Loft ArchDaily "Paschke Danskin Double Loft" Aug. 15/2011
2010	Rhode Island Monthly, Design Awards, Silver Medal given to 3six0 Architecture Stone House Barn, Restaurant and Spa
2009	AIA Rhode Island, Design Awards, Merit Award given to 3six0 Architecture Stone House Inn by 3six0 Architecture
2009	AIA Rhode Island, Design Awards, Merit Award given to 3six0 Architecture Stone House Barn, Restaurant and Spa
2009	Rhode Island Monthly, Design Awards, Gold Medal Award given to Friedrich St. Florian Architects Decof Residence, College Hill Residence
2000	Rhode Island School of Design American Institute of Architects Henry Adams Gold Medal for Excellence in Design
1999	X-Large Grant for multi-disciplinary study in design, RISD, Providence, Rhode Island
	EXHIBITS
2018	Cevisama 2018 "Ceramic Tectonics: Tile Grid Shell" Flat tile ceramic structure by: Olga Mesa, Yonghwan Kim and Milena Stavric, Zach Seibold (project manager) and Martin Bechthold (director).
2016	Ten Degrees Exhibition by Chuck Hoberman "Crease" origami robot by Olga Mesa, Malika Singh and Saurabh Mhatre featured at the exhibition.
2015	2015 Wyss Institute for Biologically Inspired Engineering Retreat "Auxetic Surfaces: Performance through Deformation and Instability (PTDI)" by Olga Mesa, Malika Singh and Saurabh Mhatre.
2015	Design Symposium: "Informal Robotics" with Robert Wood, Conor Walsh, and Rob MacCurdy; Moderated by Chuck Hoberman. "Crease" origami robot by Olga Mesa, Malika Singh and Saurabh Mhatre featured in symposium

exhibition, poster and lecture.

2014 Ceramics Exhibition at Office for the Arts at Harvard University

Art and Architecture pieces: "Experiments in Additive Clay Deposition: Woven Ceramics" by Olga Mesa, Heamin Kim and Jared Friedman.

2014 **2014** Wyss Institute for Biologically Inspired Engineer Retreat

"Crease" origami robot by Olga Mesa, Malika Singh and Saurabh Mhatre featured in Retreat Exhibition.

2012 Re:making Architecture 2012 RISD Architecture Symposium

Work by Olga Mesa featured in exhibition and featured interview.

2007 De/construct I Architectural Installations Exhibition

Work by Olga Mesa featured in exhibition

INVITED LECTURES AND WORKSHOPS

2021 **2021 UMSNH Invited Lectures and Workshops**

Universidad Michoacana de San Nicolás de Hidalgo. Lecture: "Performance²" by Nate Fash and Olga Mesa Workshop: "Choreographying Fall" by Olga Mesa

2018 2020 Virtual Frictions

Louisiana State University (LSU) School of Architecture. Workshop: "Interdimensional Narratives." by Olga Mesa.

2015 **Deconstructing Design Practice Symposium.** Alternative Design Practices in Latin America, Harvard

Graduate School of Design. Moderated by Luiz Valenzuela and Felipe Hernandez.

Lecture: "Listo! Vamos." by Olga Mesa.

2015 **Building Local Symposium**

Lecture: "Habitat and Construction" by Olga Mesa.

PROFFESIONALS QUALIFICATIONS

2010 N.C.A.R.B. Certificate, Completion of the Intern Development Program

2002 LEED AP. Leadership in Energy and Environmental Design Accredited Professional