

MING TANG, RA, NCARB, LEED AP

Associate Professor, Registered Architect

School of Architecture and Interior Design, 8280B College of DAAP, University of Cincinnati

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BIOGRAPHICAL

EDUCATION

- Master of Architecture, School of Architecture, Tsinghua University, China. 2000.
- Master of Fine Art, Interactive Design & Game Development, Savannah College of Art and Design. 2008.
- Master of Art, Digital Media Art and Technology, Michigan State University. 2003
- Bachelor of Architecture, School of Architecture, Tsinghua University, China. 1997.

ACADEMIC EXPERIENCE

- 2016-present
Associate Professor, School of Architecture and Interior Design (SAID), College of DAAP, University of Cincinnati, OH
- 2010-2016
Assistant Professor, School of Architecture and Interior Design (SAID), College of DAAP, University of Cincinnati, OH
- 2006-2010
Director of Digital Design & Computation (previously called Electronic Design) Program, Professor of Architecture, Architecture Department, Savannah College of Art and Design, GA
- 2003-2006
Professor of Architecture, Architecture Department, Savannah College of Art and Design, GA

PROFESSIONAL EXPERIENCE

2007-present. Founder & Principal

TYA Design. LLC.

Selected projects:

- Changbaishang hot spring resort, China.
- Strange Wall installation. Collaborate with Mara Marcu.
- PINGDI 1.1: Alternatives for Low Carbon City and Architecture (ALCCA). Shenzhen, China. Client: Shenzhen center for public art.
- 2015 Decity Competition.
- Silicon Valley of China. Zhuhai. China. Collaborat with Architect Zhou Yiyi. Client: DanTian Group, China.
- HYK urban design. Dalian, China.
- Caged Thing. 10 up competition. Atlanta. GA.
- Urban Rhizome—Agriculture Network in Milan 2030
- Temporary outdoor gallery space for Art Alliance, Austin, TX
- Self-sufficient skyscraper, Evolo 2010 skyscraper competition
- Newark visitor center, Newark, NY
- Monument tower at Za'abeel Park, Dubai, UAE
- Revision Dallas—Residential complex in Dallas, TX
- Lego Farm—Residential complex in Newark, NY

- Vertical Farm—Rehabilitating Wenchuan earthquake-stricken, Wenchuan, China
- Paper house, Sichuan, China
- Northern Harbor planning and urban design, Copenhagen, Denmark

2007-2010. Consultant

Gunn, Meyerhoff, Shay Architects, Savannah, GA

Selected projects:

- Townhouse on 31st Street, Savannah, GA (constructed)
- 101 Ellis Square building complex, Savannah, GA
- Mixed-use complex, 418 Meeting Street, Charleston, SC
- Condominium at Oglethorpe Square, Savannah, GA
- First African American Baptist Church renovation, Savannah, GA
- Hotel on Barnard Street, Savannah, GA
- Resurrection of Our Lord Catholic Church, Savannah, GA
- The Sheraton Hotel on Bay Street, Savannah, GA

2009-2010. Consultant

Hussey, Gay, Bell & DeYoung Engineers & Architects

Selected projects:

- Peace Hotel design for Milon Group, Miami, FL

2007-2009. Lead designer

Media Interface Network Design (M.I.N.D) Lab, Michigan State University

Responsibility: Real-time visualization and interactive design

2002-2003. Creative Director

Konnech' Inc, Okemos, MI

Responsibility: Human-computer interface design

2002. Lead designer

Media Interface Network Design (M.I.N.D) Lab, Michigan State University

Responsibility: Virtual reality, interactive design, real-time visualization

2002. 3D artist

Institute of Creative Technologies (ICT), University of Southern California

Responsibility: Motion capture, 3D visualization

1998-1999. Junior Architect

Jinhua Municipal Department of Urban Planning, Zhejiang Province, China

Selected projects:

- Urban Renovation of Jiefang Street, Jinhua, China

1997-2000. Junior Architect

Andi Architectural Design & Consultation Co., Ltd, Beijing, China

Selected projects:

- Shanghai University Campus Planning and Design, Shanghai, China (constructed)

1997. Intern Architect

Tsinghua Architectural Design, Division One, Beijing, China

Selected projects:

- Urban Design of Sitong Bridge Area, Beijing, China

- The Electric Center Tower, Beijing, China

1996-1997. Intern Architect

China Architecture Design & Research Group, Beijing, China

Selected projects:

- Fuhua Center, Beijing, China

TEACHING ACTIVITIES

AREAS OF EXPERTISE

- **Parametric Design & Computation**
The application of various parametric design techniques including digital modeling, non-linear thinking, and generative design. Building is constructed as an information model containing a large quantity of parameters that can be computed in various design phases.
- **Digital Fabrication**
The integration of digital fabrication technologies including laser cutting, 3D printing, CNC milling, and Robot into the parametric design pipeline. Prototyping by various computer-aided design (CAD) and computer-aided manufacturing (CAM) software.
- **Performance Driven Design & Simulation**
The simulation and analysis of building performance in the relation to the environmental, structural, and social parameters. Topics include wayfinding, crowd behavior, agent-based system, solar, thermal, and energy analysis, form validation, genetic evolution based form seeking and design optimization methods.
- **Real-time Visualization & Virtual Reality & Augmented Reality**
Explores the interactive virtual reality (VR) and Augmented Reality (AR) system, and real time rendering for architectural visualization.
- **Geography Information System (GIS) & Urban Simulation**
Explores various approaches of using GIS data to study social, economic and geospatial information and their relationships to the urban form.
- **Sustainable Urbanism in the Global Perspective**
Research on various urban design issues during the rapid urbanization in China. Multi-disciplinary research with architecture, urban design, city planning and environmental engineering.

COURSES TAUGHT

2010- Present. School of Architecture & Interior Design (SAID), College of DAAP, University of Cincinnati.

- ARCH 202 Architectural Studio 2
- ARCH 203 Architecture Studio 3
- ARCH 3014 Digital Media
- ARCH 4001 Architecture Studio
- ARCH 4002/402 Capstone Architecture Studio
- ARCH 512 Graduate Architectural Representation & Composition.
- ARCH 7001 M.Arch 1 Graduate Studio
- ARCH 7002 Visualization I
- ARCH 7013 Design Visualization II
- ARCH 7014. Design Visualization III
- ARCH 7036 ARCH Elective
- ARCH 713 Graduate Elective Studio

- ARCH 716 Performance driven design. Special Topics in Architectural Representation
- ARCH 794 Parametric Thinking & Non-Linear Design. Special Topics on Digital Media
- SAID 294 Computer Skills
- SAID 6099 Sustainable Urbanism in the global perspective. Study abroad in China.
- Architecture Graduate Thesis Advising
- Independent Study
- UC Honor Program, 38HNRS371H

2003-2010, Savannah College of Art and Design

- Architecture Graduate Thesis Advising
- URBA 260 Development Issues in Urban Design
- URBA 709 Urban Design Studio I, II, III
- ELDS720 Electronic Implementation for Urban Design
- ELDS 750 Spatial Simulation
- ELDS708 Communication in Electronic Design
- ELDS775 Electronic Design Simulation and Communication
- ELDS 330 Visualization I
- ELDS 430 Visualization II
- Online courses development for SCAD E-Learning

CREATIVE / SCHOLARLY / RESEARCH

EXHIBITIONS – REFEREED

2016

- Tang, M., Marcu, M., Sculpture Object and Functional Art and Design (SOFA Expo). Chicago. Nov 2-6
- Tang, M. "Inside Out". 2016 DAAP SAID Faculty Show. Reed Gallery, University of Cincinnati. 08.25-09.25
- Marcu, M., Tang, M., *Strange Loop*. Project Exhibition. 104th Annual ACSA conference. Seattle, WA. March 17-19.

2015

- Marcu, M., Tang, M., *Strange Wall*. In Association for Computer Aided Design in Architecture (ACADIA) 2015 Conference proceeding. Cincinnati, OH. 10.19-25
- Tang, M., Marcu, M., "Transmuted Tectonics." In ACADIA 2015 Conference proceeding. Cincinnati, OH. 10.19-25

2014

- *Sculpture Shell*, Art2make exhibition, College Art Association, Chicago, 02.15. Collaborate with Jonathon Anderson.
- *Integrated work of MAN and MACHINE: digital craft as design agent*. ACADIA 2014 Conference project poster exhibition. Los Angeles, CA. 10.23- 25. 2014

2013

- *dFORM: digital fabrication of responsive materials*. ACADIA 2013 Conference. Adaptive Architecture. Waterloo, Canada. 10.24-10.26.
- *Rule Based Computation & Generative form seeking*. ACSA 101: New Constellations / New Ecologies. Poster Exhibition. San Francisco, CA. 03.21-03.24.

2012

- *Performance-based Generative Design: An investigation of the parametric nature of architecture*. 100th ACSA Annual Conference. Poster Exhibition. Boston. MA. 03.01- 03.04.

2011.

- *POST FACT: Visualizing Information*, curated exhibition, d3, Design Gallery of the Universidad de Monterrey (UDEM), Monterrey, Mexico, 02.22 - 03.07
- *Sketch*, curated exhibition, sponsored by the Universidad de Monterrey in collaboration with d3. Universidad de Monterrey Centro de la Comunidad Universitaria Monterrey, Mexico. 03.05 – 03.12.

2010

- *Heterogeneity: Math Driven Form Seeking + Fabrication*, ACADIA 2010 conference project exhibition, Pratt Institute, Siegel Gallery, New York City.
- *Math, Particle and Field, A New Way to Generate Architectural Forms*, SIGGRAPH 2010 conference poster exhibition, Los Angeles, CA. 07.25-07.29.

2009

- *City Generator*, SIGGRAPH 2009 Poster exhibition, Ernest Morial Convention Center, New Orleans, Louisiana. 08.03-08.07.
- *MathMorph: Fabrication*, poster exhibition of 2009 ACSA Southeast Fall Conference, Savannah, GA
- *Ever Present & In Motion*, juried group exhibition, ACA Gallery, Atlanta, GA.
- *Ever Present & In Motion*, juried group exhibition, Pei Ling Chan Gallery, Savannah, GA.

2008

- *Flaming Cubic / Taihu Rock*, New World Streetscape Exhibition, Beijing, China

EXHIBITIONS – INVITED

2016

- *Paper Shelter*. DAAP Cares. UC Niehoff Urban Studio. 04.13

2015

- *Repetitive Play*. Merrick Anderson, Colin Klimesh, Ming Tang, and Broc Toft. Emily Galusha Gallery. Northern Clay Center (NCC). Minneapolis, MN. 11.23.2014-01.04.2015
- *Popup Cincy*. DAAPcares Exhibition. Niehoff Studio, UC. 04.14. Collaborate with Prof. Catherine Richards.
- *Student Exhibition*. Architectural Foundation of Cincinnati. 04.17-04.23.

2014

- *Silicon Valley of China*. DAAPcares Exhibition. Niehoff Studio, UC. 04.01.
- "Strange wall" project. Exhibited in 2014 SOFA Expo in Chicago. Nov. 4-9. 2014. Collaborate with Prof. Mara Marcu.

2013

- *Rapid Conference*. 2013. Pittsburgh. PA. "Mathmorph" sculpture won Best In Show award. 06.10-06.13, 2013. Fabricator: American Precision Prototyping.
- *Sustainable Urbanism*, study abroad in China. Association of Environmental Engineering & Science Professors (AEESP) Conference, Colorado. (presented by Prof. Lu)

2012

- *Math-Morph*. Collaborated with Jonathon Anderson. Center for Visual Arts at the Greensboro Cultural Center. Greensboro. North Carolina. 03.29.2012

2011

- 2011 DAAP Faculty Show, Dorothy W. and C. Lawson Reed Jr. Gallery, 09.29-10.26

2010

- *New Faculty Exhibition*, Meyers Gallery, DAAP, University of Cincinnati, OH
- *MilanoStadKrone2030*. SpazioMostre Guido Nardi – Politecnico di Milano. Milan. Italy. 06.17–06.30.
- "Bamboo House," poster exhibition at 2010 World Bamboo Day, Granada, Nicaragua, sponsored by CO2 Bambu.

- 2008
- Chichen Itza, Lodge-Museum in Yucatan, Arquitectum, permanent online exhibition
- 2007
- New York Immigration Museum Design, Arquitectum, permanent online exhibition
 - Geno-Matrix, 07 Skyscraper competition, eVolo Architecture online exhibition
- 2002
- Poster exhibition: Experiential E-commerce Conference, East Lansing, MI
- 1999
- Poster Exhibition: Architecture and Environment, XX International Union of Architects (UIA) Conference, Beijing, China

PUBLICATIONS – PEER REVIEWED

BOOK

- **Tang, M.** Parametric Building Design with Autodesk Maya. Publisher: Routledge. ISBN: 0415644461. 2014.

BOOK CHAPTER

- **Tang, M.** Section I. Innovative Tools. Data Driven Landscapes. Edited by Jonathon Anderson, Daniel Ortega. Innovations in Landscape Architecture. Routledge. ISBN: 1072954 UK. 2016.

JOURNAL ARTICLE

- 2017
- **Tang, M.** Hu, Y. Pedestrian simulation in transit stations using agent-based analysis. Urban Rail Transit. 2017. doi:10.1007/s40864-017-0053-5
- 2016
- **Tang, M.**, Marcu, M. Physics Simulation & Form Seeking in Architecture Design Education. International Journal of Architecture, Engineering and Construction. International Journal of Architecture, Engineering and Construction. Vol 4, No 4 (2015)
 - Jordan, T., **Tang, M.** Digital Craft:New Mix of Process, Tools and Material.Blur: d3:dialog, international journal of architecture + design. published by d3. 06. 2016
- 2015
- **Tang, M.** Urban modeling with agent-based system. Perkins +Will Research Journal Vol. 07.02. Special Issue: Future of Architectural Research. 12. 2015
- 2013
- **Tang, M.**, Koesters, H. Parametric Computation: student voices on parametricism and design technique. International Journal of Interior Architecture + Spatial Design. (ii Journal) Vol 1. 2013.
 - **Tang, M.**, Anderson, J., Aksamija, A., Hodge, M. Performative Computation-aided Design Optimization. ARCC Journal. Vol. 9. Issue 1.
- 2012
- Aksamija, A., Snapp T., Hodge, M., **Tang, M.** Re-Skinning: Performance-Based Design and Fabrication of Building Facade Components: Design Computing, Analytics, and Prototyping. Perkins + Will Research Journal. Vol. 04.02. 2012
 - **Tang, M.** Visualizing GIS Information: Digital fabrication and 3D Diagrammatic Urban Models. *Assemble*. d3 publications. ISBN:0615652700.

- **Tang, M.**, Aksamija, A., Anderson, J., Hodge, M. Data Driven Transmutation: an investigation of performance-based design and adaptive systems. AIA Forward Journal 112. 2012.
- 2011
- **Tang, M.**, Aksamija, A., Hodge, M., Anderson, J., Performance-Driven Design and Prototyping, Design Computation and Fabrication, Perkins + Will Research Journal. 2011. Vol. 03. 02.
- 2007
- **Tang, M.**, Real Time Visualization, The Open House International, 2007, Vol.32, London, U.K, p7-16

CONFERENCE PAPER

- 2016
- **Tang, M.** Hu, Y. Agent-based simulation for crowd flow analysis, 56th ACSP conference. Portland, Oregon.
 - Ding, C., **Tang, M.** Studies on Development and Color of Tibetan Palace Architecture. International Symposium on Architectural Interchanges in Asia (ISAIA). Sendai, Japan. 09.20.
- 2015
- Marcu, M. **Tang, M.** Data Mapping and Ornament in Digital Craft. 2015 ACADIA Conference proceeding. Cincinnati, OH.
 - **Tang, M.** Computational Landscape. Data-driven urban modeling with the agent-based system. 2015 Architectural Research Centers Consortium (ARCC) Conference. Chicago, IL.
 - **Tang, M.** Self-organizing city: Experiments using multi-agent model and space syntax. 2015 Symposium on Simulation for Architecture and Urban Design (SimAUD). Society for Modeling & Simulation International (SCS). Washington D.C.
- 2014
- Anderson, J., **Tang, M.** Crafting Soft Geometry: Form and Materials Informing Analog and Digital Craft Processes. SIGRADI 2014 International Conference, Montevideo, Uruguay. isbn: 978-9974-99-655-7. SIGRADI Conference Proceedings, pp. 183-186
 - **Tang, M.** Adaptive Skin: Data-driven design and fabrication. Advanced Building Skins Conference Proceeding, Energy Forum. Bressanone, Italy.
- 2013
- **Tang, M.**, Auffrey, C., Lu, M. From Statistical to Diagrammatic. Geo-spatial & time-based data visualization through parametric modeling. 4th Annual Symposium on Simulation for Architecture and Urban Design (SimAUD). San Diego. CA.
- 2012
- **Tang, M.**, Anderson, J., Aksamija, A., Hodge, M. Performance-Based Generative Design, An investigation of the parametric nature of architecture, 100th ACSA conference proceeding, Boston, Massachusetts, 2012
 - **Tang, M.**, Vera, M., Anderson, J. Yeshayahu, S. Adaptive Skin: Performance Driven Design and Fabrication. 2012 National Conference on the Beginning Design Student (NCBDS), College Park, PA.
 - Vera, M, Anderson, J., **Tang, M.**, Yeshayahu, S. In-form: Towards a Design Science Revolution. 2012 National Conference on the Beginning Design Student (NCBDS), College Park, PA.
- 2011
- **Tang, M.**, Anderson, J., Information Urbanism---Parametric Urbanism in Junction with GIS Data Processing & Fabrication, 2011 Annual Architectural Research Centers Consortium (ARCC) Spring Research conference, Detroit, MI
 - Anderson, J., **Tang, M.**, Form Follows Parameters: Parametric Modeling for Fabrication and Manufacturing Processes, 16th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA), Newcastle, Australia.

- **Tang, M.**, Vera, M., Anderson, J., Representation and Realizing: A Hybrid Process of Immaterial and Material, 2011 National Conference on the Beginning Design Student (NCBDS), Lincoln, Nebraska
 - Anderson, J., **Tang, M.**, Vera, M., Yeshayahu, S., Parametric Thinking [Not Modeling] as a Generator, 2011 National Conference on the Beginning Design Student (NCBDS), Lincoln, Nebraska.
 - Vera, M, Anderson, J., **Tang, M.**, Yeshayahu, S., Re-Tooling the Logic of Design, 2011 National Conference on the Beginning Design Student (NCBDS), Lincoln, Nebraska.
- 2010
- **Tang, M.**, Anderson, J., Mathematically Driven Forms and Digital Tectonic: A Formula for Realizing the Digital, 2010 ACADIA conference proceeding, New York
 - Anderson, J., **Tang, M.**, Interactive Information Model for Digital Fabricator. 2010 ARCC-EAAE Conference, Washington, D.C.
- 2009
- **Tang, M.**, Anderson, J., A Trace to Simulacrum: Blurring the Boundary between Art and Architecture, proceeding of 2009 ACSA Southeast Fall Conference
- 2008
- **Tang, M.**, City Generator: GIS Driven Genetic Evolution in Urban Simulation, proceeding of the 96th ACSA conference
- 2005
- **Tang, M.** Low-Cost Virtual Reality Aided Design in Architecture Education, Virtuality conference, Turin, Italy
- 2003
- Lim, L., Jackson, L., Biocca, F., Barbatsis, G., Bradburn, K., **Tang, M.**, Zhao, Y., Fitzgerald, H. Presence in Informative Virtual Environments: The Effects of Self-Efficacy, Spatial Ability and Mood, Proceeding of Mass Communication & Society Division of the Association for Education in Journalism and Mass Communication (AEJMC) conference
 - Jackson, L. A., Biocca, F., Lim, L., Bradburn, K., **Tang, M.**, Mou, W., Barbatsis, G., von Eye, A., Zhao, Y., & Fitzgerald, H. (2003). Effects of culturally adapted interfaces on learning and attitudes: Findings from the HomeNetToo project. Proceeding of the International Association for the Development of Information Society (IADIS) International Conference, WWW/Internet 2003, Algarve, Portugal

CONFERENCE PROJECT

- 2016
- Marcu, M., **Tang, M.**, Strange Loop. Project Exhibition. 104th Annual ACSA conference. Seattle, WA. March 17-19.
- 2015
- Marcu, M., **Tang, M.**, Strange Wall. In Association for Computer Aided Design in Architecture (ACADIA) 2015 Conference proceeding. Cincinnati, OH. 10.19-25
 - **Tang, M.**, Marcu, M., "Transmuted Tectonics." In ACADIA 2015 Conference proceeding. Cincinnati, OH. 10.19-25
- 2014
- **Tang, M.**, Klimesh, C. Integrated work of MAN and MACHINE: digital craft as design agent. ACADIA 2014 Conference. Conference proceeding book. Los Angeles, CA.
- 2013
- **Tang, M.** dFORM: digital fabrication of responsive materials. ACADIA 2013 proceeding book: Adaptive Architecture. Cambridge, Canada.

- **Tang, M.** Rule-Based Computation & Generative form seeking. ACSA 101: New Constellations / New Ecologies. Project catalog book. San Francisco, CA.
- 2010
- **Tang, M.**, Anderson, J., Heterogeneity: Math Driven Form Seeking + Fabrication, LIFE in:formation, On Responsive Information and Variations in Architecture, Exhibition catalog book. ACADIA. **ASIN:** 1450734723

PUBLICATIONS – NON-PEER REVIEWED

BOOK

- **Tang, M.** Wang, X., Auffrey, C., Lu, M. Low Carbon City. A Developer's Manual. Published by Shenzhen Center for Design, China. 2015.
- **Tang, M.** Zarabadi, L. Sustainable Urbanism. Study abroad in China. Blurb. 2014.
- **Tang, M.**, Yang, D., Urban Paleontology: Evolution of Urban Forms, Universal Publishers, ISBN: 1599429497. 2008.

JOURNAL ARTICLE

2008

- **Tang, M.**, Yang, D., Echo of Art: Landscape Design in the Age of Modernism & Post-Modernism, Urban Space Design, 2008, Vol.2, China, p40-42

2007

- **Tang, M.**, Yang, D., Reclaim Industrial Landscape, Urban Space Design, 2007, Vol.5, China, p28-33

1998

- **Tang, M.**, Zhu, W., Urban Text, The Foreign Urban Planning, 1998, Vol.4, China, p10
- **Tang, M.**, Li, F., An Evolutional Way for Urban Growing: "Cities with Soul" Project, Urban Age, 1998, Vol.6, China, p22
- **Tang, M.**, The Architecture of Independent (translation), Urban Age, 1998, Vol.6, China, p33

GRANT

2016

- CUE grant. UC. \$4,500. Hybrid Reality: Using Augmented Reality and Holograms for Wayfinding and Signage Research. PI: **Tang, M.**, Co-PI: Auffrey, C., Wang, X.
- Provost Innovative Technology Award. \$70,000. Architectural Robotic Lab. PI. Klemmt. C., **Tang, M.** Marcu.M.
- Third Century Faculty Research Grant. UC. \$10,000. Unfolding CocoOn. PI: **Tang, M.**, Co-PI. Marcu.M

2015

- FDC Department & Interdisciplinary Grant. An Interdisciplinary Approach to Using Immersive Data Visualization for Teaching and Research. FDC UC. \$ 9,700. PI: **Tang, M.**, Co-PI: Auffrey, C., Wang, X., Lu, M.
- Low Carbon City. Shenzhen Center for Design. ALCCA Parallel Research Grant. China. RMB 50,000 (\$8,069) PI: **Tang, M.**, Co-PI: Auffrey, C., Wang, X., Lu, M.
- Faculty Development Award. FDC. Track B, Hardware. \$430

2014

- Block grant. UC International (study abroad) \$24,000. Sustainable Urbanism. Co-taught with Auffrey, C., Wang, X., Lu, M.
- UC Forward Grants. Sustainable Urbanism: An International Perspective. Co-PI: Auffrey, C., Wang, X., Lu, M. \$7,800.
- Faculty Development Award. FDC, University of Cincinnati. \$2,695. (ACADIA, LA)
- Faculty Development Award. FDC, University of Cincinnati. \$2,410. (ARCC, Hawaii)

2013

- Faculty Development Award. FDC, University of Cincinnati. \$2,695. (ACADIA, Cambridge, Canada)
- 2013-2014 UC Forward Grants. Sustainable Urbanism: An International Perspective. Co-PI: Auffrey, C., Lu, M. \$10,000.

2012

- Faculty Abroad Grant. UC International Office. \$500.
- University Research Council Grant (URC) PI: **Tang, M.**, Co-PI: Auffrey, C., Lu, M. \$18,175.(D700178)
- Faculty Development Award. FDC, University of Cincinnati. \$2,379.
- UC Forward Grants. Sustainable Urbanism: An International Perspective. Co-PI: Auffrey, C., Lu, M. \$9,200.
- UC Education Abroad Program Development Grants, awarded by UC International. Sustainable Urbanism: An International Perspective” (China) Co-PI: Auffrey, C., Lu, M. \$2,500.
- Faculty Development Award. FDC, University of Cincinnati. \$1,766.

2011

- 2011 Instructional Technology Institute, University of Cincinnati, \$750.
- New Faculty Travel Grant, DAAP, University of Cincinnati, \$350.
- Faculty Development Award, FDC, University of Cincinnati, \$1,265.
- Awards from Young Architects Forum of Atlanta,\$250.

2010

- Awards from d3 natural system, \$500.

2009

- Presidential Fellowship, Savannah College of Art and Design, MathMorph: Digital Fabrication, \$5,000 (PI).

2008

- Presidential Fellowship, co-author with Dihua Yang, Savannah College of Art and Design, Book titled *Urban Paleontology: Evolution of Urban Forms*, \$5,000.
- Award from Chichen Itza competition, \$5,000.

2000 & 2001

- Fellowship, Michigan State University.

CONFERENCE PRESENTATIONS

2016

- Integration of GIS and Parametric Modeling. The 10th IACP Conference: Government and Planning in Transitional China. Peking University, Beijing, China. 07.03, 2016

2015

- Data Mapping and Ornament in Digital Craft. 2015 ACADIA Conference proceeding. Cincinnati, OH. 10.22
- Computational Landscape. Data-driven urban modeling with the agent-based system. 2015 Architectural Research Centers Consortium (ARCC) Conference. Chicago, IL. 04.07
- Self-organizing city: Experiments using multi-agent model and space syntax. 2015 Symposium on Simulation for Architecture and Urban Design (SimAUD). Society for Modeling & Simulation International (SCS). Washington D.C. 04.15

2014

- Adaptive Skin: Data-driven design and fabrication. Energy Forum. advanced building skins conference, Bressanone, Italy. 10.28-29.

2013

- From Statistical to Diagrammatic. Geo-spatial & time-based data visualization through parametric modeling. 4th Annual Symposium on Simulation for Architecture and Urban Design (SimAUD). San Diego. CA. 04.09

2012

- Performance Based Generative Design. An investigation of the parametric nature of architecture. 100th ACSA Annual Conference. Boston, MA. 03.02.2012

- Adaptive Skin: Performance Driven Design and Fabrication. 2012 National Conference on the Beginning Design Student (NCBDS), State College, PA. 03.31.2012
- 2011
- Information Urbanism---Parametric Urbanism in Junction with GIS Data Processing & Fabrication, 2011 Annual Architectural Research Centers Consortium (ARCC) Spring Research conference, Detroit, MI
 - Representation and Realizing: A Hybrid Process of Immaterial and Material, 2011 National Conference on the Beginning Design Student (NCBDS), Lincoln, Nebraska
- 2010
- Mathematically Driven Forms and Digital Tectonic: A Formula for Realizing the Digital, ACADIA conference, Cooper Union, New York City, 10.22
- 2008
- GIS Driven Genetic Evolution in Urban Simulation, the 96th ACSA conference, Houston, TX
- 2006
- Virtual Reality in Architectural Education, the 94th ACSA conference, Salt Lake City, Utah

INVITED LECTURES

- 2016
- Parametric Design. Beijing Jiaotong University, Beijing, China. 07.08.
- 2015
- Path Optimization using multi-agent model. Resilient City (韧性城市) Symposium. Beijing Jiaotong University, Beijing, China. 05.08.
 - Parametric and Data Driven Design, University of Cincinnati & Qingdao Technology University Collaborative Workshop. Qingdao, China. 05.12
- 2013
- From Statistical to Diagrammatic. College of Architecture and City Planning. Beijing University of Technology (BJUT), Beijing, China. 04.27
 - Performance & Sustainable Design. School of Civil Engineering, Shandong University, China. 05.02
 - Parametric and Non-Linear Design. Dalian Urban Development Institute. Dalian, China. 08.08
 - Parametric and Non-Linear Design workshop. BLVD International. ShenZhen, China. 07.27-07.28.
- 2012
- Linear Digital Tectonic and Parametric Architecture Design. School of Architecture. Tsinghua University. Beijing. China. 06.14.
 - Performance & Sustainable Design in the Age of Parametric. College of Architecture and City Planning. Beijing University of Technology (BJUT). Beijing. China. 06.13
 - DAAP Allied Arts Circuit. Design Interventions. 5.24
 - Autodesk Webinar. Creating Compelling Visualizations and Renderings. Autodesk. 04. 17
 - Autodesk Webinar. Creating Compelling Visualizations and Renderings. Autodesk. 04. 18
 - Alpha Rho Chi Professor Lecture, University of Cincinnati. 11.16
- 2011
- Life of the Mind Series, University of Cincinnati. 5.10
 - Digital Architecture and Parametric Design. BLVD International. ShenZhen, China. 11.17.
 - Guest lecture for Design, Art, and Built Environment Design, (23DAPP111), Under Prof. Cindy Damschroder- 11. 08
 - Parametric Design + Performance Simulation, School of Interior Architecture, University of North Carolina at Greensboro, NC, 11.04
 - UC AIAS "Ten at Twelve" Lecture, 11.04
 - Performance Driven Design, AIAS Quad Conference, Cincinnati, OH, 10.15

- Guest Lecture on representation. Graduate Topic Seminar (ARCH745), under Prof. Black Ann. 05.05.
 - DAAP Cares, UC Niehoff Urban Studio/The Turner Center, 4.19
- 2010
- Post Exhibition Forum, Evolutive Means: On Adaptation and Selection in Architectural Design, Pratt Institute, New York City, 10.23
 - UC AIAS "Ten at Twelve" Lecture, 10.29
 - Mathmorph, PechaKucha Lecture, DAAP, University of Cincinnati, OH, 11.03
 - Digital Architecture in the Age of Information Modeling, College of DAAP, University of Cincinnati, Cincinnati, OH.
- 2009
- Maya for Conceptual Design and Integration with BIM, Autodesk University 2009 conference, Las Vegas
 - Math Morph: Digital Fabrication, PechaKucha Savannah Chapter, S.P.A.C.E. Savannah, GA
 - Form Follows Algorithm, College of Architecture, University of Arizona, Tucson, AZ
 - Digital Design and Computation, School of Architecture, University of South Florida, Tampa, FL
- 2007
- Immigration Museum Design, The Museum of the City of New York, NY
- 2003
- Digital Art and Architecture, Department of Architecture, Iowa State University, Ames, IA
 - Digital Computation and Visualization, Savannah College of Art and Design, Savannah, GA

CITATIONS

- 2016.
- Ephemeral Architecture: 1000 Ideas by 100 Architects. Alex Sanchez Vidiella. Publish by Promopress. 2016. ISBN-10: 8415967705
- 2013
- City Sense: Shaping our environment with real-time data. Lucas Capelli. Published by Actar. ISBN: 8415391293
- 2012
- Folding Bamboo House. University of Siegen. Department of Architecture Database.
 - Bamboo House. Nueva Construcción. Span.
- 2011
- Limited Edition Skyscrapers Book, Evolo. ISBN: 978-0-9816658-4-9
 - Bamboo House, ffw MAG, 23rd Issue, Brazil
 - Emergency Architecture, magazine, May issue
- 2010
- Contemporary Digital Architecture: Design and Techniques, Gray-scale, Germany. ISBN: 8492796596.
 - ROUGE (China) magazine, Editor AntoineNeufmars, September issue, 2010
 - Low Price Architecture -Starter Homes, Minimal Houses, Emergency Accommodation, Publisher: BRAUN, ISBN: 3037680628, August issue
 - Art & Soul: Savannah College of Art and Design faculty exhibit work, Savannah Morning News.
 - The Self-Sufficient City, Envisioning the Habitat of the Future, IAAC, ACTAR, Page 38
- 2009
- SIGGRAPH'09 proceeding DVD: Computer Graphics and Interactive Techniques
 - Live the Box, International Book Publishing, Liaoning Science and Technology Publishing House, China
 - Self-Fab House, 2nd Advanced Architecture Contest, ACTAR, ISBN: 978-84-96954-74-8

- Boxes for Living: Are Containers One Solution for the Future? Competitions Magazine, spring issue
 - The Shipping Container as Building Block, The New York Times, January 31, 2009
 - Minimum Dwelling, LinksBooks, ISBN: 978-84-96969-77-3
 - Inside Outside, The Indian Design Magazine, Mumbai, India
 - GenoMatrix Skyscraper, Tasarım Magazine, February issue, Turkey
- 2008
- Story on Bamboo House, California Home + Design, December Vol.1
 - Skyscraper for the XXI Century, eVolo, New York, p66-67
 - Jorge Chapa, The Origami-Inspired Folding Bamboo House, Inhabitat, October issue
 - Landscape Competition, Chichen Itza 2008, Lodge-Museum, Yucatan, Mexico, Arquitectum
 - David Basulto, Folded Bamboo + Paper House by Ming Tang, Archdaily, October issue
 - Lloyd Alter, Folded Bamboo Houses by Ming Tang, Treehugger, 10. 22
 - Streetscape in a New World, International Competition of Urban Streetscape design, Shanghai, China
 - Homeland Rehabilitation, New Architecture Magazine, Vol. 6, China, p26
 - Origami Folded Houses, Planeta Fascinante, Spain, November issue, p8
 - Folding Bamboo House, Pilot Magazine, December issue, New Zealand
 - Folding Bamboo House, Casamica, Italy
 - Folding Bamboo House, D Magazine, Italy
 - Folding Bamboo House, Igloo Media, Romania
 - Lodge Museum Chichen Itza, I Viaggi del Sole, Il Sole 24 Ore, Italy
 - Folding Bamboo House, The Village Times, Time Out Beijing, China
- 2007
- The New York Immigration Museum, WettbewerbeAktuell, Germany, November issue
 - Pimp My Dealership, Scion Showroom Design, Surface, Substance + Style, Spring, p124-125
 - Urban Competition New York 2007, Tower Museum in Manhattan, Arquitectum
 - 07 Skyscraper Competition, L'arca, No. 226, June issue, Italy
 - 07 Skyscraper Competition, WettbewerbeAktuell, May issue, Germany
 - 07 Skyscraper Competition, Tatlin, June, Russia

INTERVIEWS

- 2010
- Design works of Tang & Yang Architects, interviewed by editor Antoine Neufmars of Rouge Magazine.
- 2009
- Folded Bamboo + Paper House, interviewed by broadcast journalist Charlie Rose, Earth Award Gala. Four Seasons Restaurant, 01/12, 2009 in New York City.
- 2008
- Bamboo House, interviewed by Lydia Lee, California Home+Design, Hartle Media
 - "Just Jerusalem 2050" award, interviewed by SCAD News, Savannah College of Art and Design
- 2007
- Scion Showroom Design, interviewed by Dee Murphy, Surface, Substance + Style
 - Self-Sufficient Housing Design, interviewed by Melissa Wheeler, The Chronicle, Savannah College of Art and Design
 - Immigration Museum Design, interviewed by SCAD News, Savannah College of Art and Design
 - Professors Use Organic Models in Architecture and Electronic Design, interviewed by Monique Bos, The Chronicle, Savannah College of Art and Design
- 2006

- Spartosoft, interviewed by Communicator, College of Communication Arts & Sciences Alumni News, Michigan State University
- 2004
- Maya for Design Visualization, interviewed by Alias

SERVICES

UNIVERSITY SERVICE

2017

- SAID RPT Committee. UC. (alternate)
- UC Bicentennial Legacy Committee.
- Ph.D student mentor. Khalighinejad, Farshad
- Reappointment reviewer. Ian Bellomy
- Reappointment reviewer. Steven Slaughter

2016

- Supervisor of visiting scholar, Prof. Zhao Mei. Beijing Institute of Technology. Prof. Ding Chang. China Mining University.
- SAID RPT Committee. UC.
- Member of UC Animation and Game Development Group.
- Grant Review Committee. URC Graduate Student Research Grant. UC

2015.

- Member of search committee, Digital Design/Fabrication specialist, RPC, DAAP, UC.
- Member of SAID faculty search committee.
- Member of URC Review Committee. Mid- and Late-Career Faculty Research Grant for Faculty Research Grant Program, University of Cincinnati.
- Re-appointment Reviewer, Prof. Ian Bellomy. School of Design. DAAP, UC.
- Re-appointment Reviewer, Prof. Mara Marcu. School of Architecture & Interior Design. DAAP, UC.
- Supervisor of visiting scholar. Prof. Xiangwei Zhao. Beijing Jiaotong University. 2015
- Member of SAID marketing committee.
- Member of UC Digital Media Collaborative.

2014

- Sculpture design for UC Foundation. (Work with Dean Probst, and Rapid Prototyping Center.)
- Member of URC Review Committee for Faculty Research Grant Program, University of Cincinnati.
- Faculty search committee, SAID, DAAP, UC.
- Portfolio review committee, SAID, DAAP, UC.

2013

- Sculpture design for UC President Ono's Investiture. (Work with Dean Probst, and Scott Lincoln in Rapid Prototyping Center.)
- Faculty supervisor. dFORM student organization. Niehoff Studio installation. \$7,000 granted by UC.
- DAAP Academic Technology Committee.
- Member of URC Behavioral & Social Sciences Review Committee for Faculty Research Grant Program, University of Cincinnati.

2012

- Re-appointment Reviewer, Prof. Heekyoung Jung. School of Design. DAAP, UC.
- Member of SAID RPT review committee.
- Member of Graduate admission review DAAP Academic Technology Committee.

2011

- Assist Provost Dr. Santa J. Ono during the trip to Hong Kong. Meet with Mr. Peter Woo. Visiting Hong Kong Polytechnic University. 11. 19-11.26.
- Assist Dean Emeritus Prof. Chatterjee to communicate with Tsinghua University, China to set up lecture time and visiting schedule.
- Member of search committee, Rapid Prototyping Center, Information Technology Analyst, UC
- Member of UC Innovation Council
- Faculty advisor of student club “digital fabrication of responsive materials (dform)”, DAAP, UC
- Member of Digital Tech group, SAID, DAAP, University of Cincinnati

2010

- Member of Digital Tech group, SAID, DAAP, University of Cincinnati

2006-2010

- Director of Electronic Design Program, Savannah College of Art and Design (SCAD), GA
Responsibility: Develop program curriculum, advise students within the program, oversee undergraduate ELDS courses, oversee graduate ELDS courses, assist the fiscal year budget preparations, develop class schedules and faculty teaching assignments

2008

- Committee member of Sustainability and Eco Practices Council, Savannah College of Art and Design

2007

- Chair of Faculty Search and Recruitment Committee (ELDS position), School of Building Art, Savannah College of Art and Design
- Member of Admission and Transfer Committee, Architecture Department, Savannah College of Art and Design

2006

- Chair of Faculty Development and Community Outreach Committee, Architecture Department, Savannah College of Art and Design
- Committee member and faculty mentor of E-Learning Council, Savannah College of Art and Design

PROFESSIONAL SERVICE

2017

- Reviewer. Simulation Modelling Practice and Theory Journal.
- IASDR2017 conference planning committee

2016

- Book proposal reviewer. Workflows: Expanding Architecture's Territory in the Design and Delivery of Buildings. Architectural Design (AD). Willy. London.
- Paper reviewer. Facade Tectonics 2016 World Congress

2015.

- Reviewer, ACADIA 2015 Conference.
- Site Chair, 2015 ACADIA Conference committee. Co-Chair with Lon Combs, Chris Perry, William Williams, Mara Marcu, and Stephen Slaughter.
- Treasurer. Chinese-American Professors & Scientists (SoCAPS) Cincinnati Chapter
- Reviewer, 4th International Conference on Civil Engineering and Urban Planning (CEUP 2015), Beijing, China
- Faculty Participant: Pop-up Cincy community project. Cincinnati.

2014

- Associate Editor. International Journal of Interior Architecture and Spatial Design. ii Journal.
- Reviewer, Enquiry / The ARCC Journal of Architectural Research. 2014

- Reviewer, 3rd International Conference on Civil Engineering and Urban Planning (CEUP 2014), Wuhan, China
 - Treasurer. Chinese-American Professors & Scientists (SoCAPS) Cincinnati Chapter.
 - Architecture consultant for Cincinnati Chinese Church at Mason. Visualization for a new building extension, Mason, OH.
 - Faculty Participant: Pop-up Cincy community project. Cincinnati.
- 2013
- Associate Editor. International Journal of Interior Architecture and Spatial Design. ii Journal.
 - Reviewer. Living Future 2013 Conference "Resilience + Regeneration" Conference. Seattle WA.
 - Reviewer. Perkins + Will Research Journal. 2013.
 - Treasurer. Chinese-American Professors & Scientists (SoCAPS) Cincinnati Chapter.
 - Book Proposal Reviewer. Routledge Publishing.
 - Paper Reviewer. ACSA 102 annual conference.
- 2012
- Paper reviewer for 2013 Architectural Research Centers Consortium (ARCC) conference.
 - Reviewer. Practical BIM. The Sixth Annual USC BIM Symposium. USC. CA.
- 2011
- Paper reviewer, Living Future 2012 Conference. Portland, Oregon
 - Member of Cincinnati BIM User group
 - Editing member, World Architecture (WA) editorial team
- 2010
- Peer paper reviewer, Urban Design and Urban Simulation - The Need for Computational Tools, KeithBesserud, Thomas Hussey, SOM IBM Journal of Research & Development
- 2009
- Editing member, World Architecture (WA) editorial team
 - Juror, AIA Charrette, South Quad Conference Fall 2009
- 2008
- Juror, Golf's Tower—Apartment Building Professional Competition, Peru, Aquitectum
 - Juror, 2008 AIA Award, Hilton Head Chapter, SC

HONORS AND AWARDS

- 2015
- Outstanding Junior Faculty Award, College of DAAP, University of Cincinnati
- 2013
- Best in Show. Sculpture in Rapid Conference. 2013. Fabricator: American Precision Prototyping.
- 2011
- Honorable mention, 10UP 2011 competition, Young Architects Forum, Atlanta, GA
- 2010
- First Prize, international architectural design competition, d3natural systems
 - Special mention, 2010 Skyscraper Competition, eVolo
 - Honorable mention, TOGS3 competition, Temporary Outdoor Gallery Space, Austin, TX, Art Alliance Austin
- 2009
- Special award, Re: Vision: Dallas Competition, Urban Revision
 - Special mention, 2A International students and young architects competition, Du(b)ilities: Supra_global_culture, 2A Magazine, UAE
 - Finalist, The Earth Award, Jury: Nicky Gavron. (Former Deputy Mayor of London), Peter Head (Director, ARUP), Dr. Kenneth Yeang (Architect, Llewelyn Davies Yeang), Thom Mayne

(Architect and Founder, Morphosis Architects), Paola Antonelli (Senior Curator of Architecture and Design, MOMA), Adam Bly (Founder, CEO and Editor-in-Chief, Seed Media Group)

- Citation awards, 20+10+X World Architecture Community Awards, Second cycle
- Citation awards, 20+10+X World Architecture Community Awards, Fourth cycle

2008

- First prize, Chichen Itza Lodge-Museum International Design Competition, Aquitectum
- Second prize, Streetscape in a New World—International Competition of Urban Streetscape Design, New World China Land Limited, di magazine, China
- Third prize, Live the Box competition, AIA Newark and Suburban and the Young Architects Forum
- Third prize, Vertical Farm—Rehabilitating Wenchuan Earthquake-Stricken, Wenchuan, China
- Honorable mention, Just Jerusalem Competition, Jerusalem 2050, Department of Urban Studies & Planning, the Center for International Studies Massachusetts Institute of Technology
- Honorable mention, Re: Construct, Sustainable materials and building practices competition, Urban Revision

2007

- First prize, Self-Sufficient Housing, 2nd Advanced Architecture Contest, Institute for Advanced Architecture of Catalonia (IAAC), Spain, Jury: Yung Ho Chang, Greg Lynn, Neil Gershenfeld
- Honorable mention, Immigration Tower Museum Design Competition, New York City, Aquitectum
- Honorable mention, 07 Skyscraper Design Competition, eVolo
- Semi-final, The 2007 Far Eastern International Digital Architectural Design (FEIDAD) Award, The Far Eastern Memorial Foundation of the Far Eastern Group, Taiwan

2006

- Semi-final, The 2006 Far Eastern International Digital Architectural Design (FEIDAD) Award, The Far Eastern Memorial Foundation of the Far Eastern Group, Taiwan

2005

- Second prize, Miami Monument International Design Competition, AIA the South Florida Chapter, Spine3D

2003

- The Best of Show, DMAT 2003 showcase, Michigan State University, MI

2002

- Best Computer Graphic, 3DCAFE Awards

1998

- First prize, Cities with Soul - The Urban Design Competition, British Council, U.K
- Second prize, Shanghai University Campus Planning and Design Competition, China, Shanghai University

1996

- Honorable mention, The competition of TianjingQiande Urban Housing, The Association of Tianjin Urban-Rural Planning Department, China

1995

- Honorable mention, The Third Ring Road Planning, Beijing Municipal Committee, China

MEMBERSHIP & ACCREDIATION

- **RA.** Registered Architect. License #: RA014122, State of Georgia. U.S.A
- **AIA** American Institute of Architects. # 38447205
- **LEED AP**, Building Design + Construction, USGBC. #: 10284411-AP-BD+C
- **NCARB** (National Council of Architectural Registration Boards) Certificate # 80378
- Certificate of ESRI GIS
- Certificate of Autodesk Revit, (Associate + Professional)
- Certificate of Autodesk Maya (Associate)
- Member of ACADIA, Association for Computer Aided Design in Architecture

- Member of Association for the Advancement of Sustainability in Higher Education, AASHE
- Member of International Living Building Institute