

PHD PROGRAM OVERVIEW 2017–18

A Year in Perspective

The 2017–18 academic year was enhanced by the progression of our two main academic programs: the PhD Architecture Research Forum and the annual Graduate Symposium. We organized the third lecture series of our annual Research Forum for the Fall and Spring semesters, which brought more than twenty local and international guest speakers to our community. Faculty, architectural historians, librarians, professionals, lawyers, visiting PhD students, and many others collaborated on the growth of our research and network. The second of our main activities, the International Graduate Student Symposium, titled *Chicago Schools: Authors, Audiences, and History*, was an important step for starting a tradition in our student-run activities. This was the second consecutive year that our PhD Program organized a peer-reviewed symposium, which once again reached territories beyond the United States. Beyond empowering students, the symposium encouraged proactive behaviors, a valuable skill in both academic and professional careers.

Curator

Marcos Petrolí, PhD Candidate
and Administrative Assistant
Illinois Institute of Technology

In addition to the continuance of the PhD Architecture Research Forum and the Graduate Symposium, we started to discuss the idea of organizing our own PhD Journal, *Prometheus*, a platform that could serve as a voice for our community. *Prometheus* could publish the production of our PhD symposia and serve as a record of our history at IIT. We realized that we had enough material to document our student life, accomplishments, and activities, and could add to our community through publication. With *Prometheus*, we could see our progress in a collective way.

During this past year, we visited the historical 1892 Charnley-Persky House in Chicago; the exhibit of architecture, art, and engineering by Skidmore, Owings & Merrill; and cultural events at the Alphawood Foundation. All of these events exemplified the variety of cultural activities circulating around our PhD Program. In the same manner, as a group of PhD students, we published and presented peer-reviewed papers in renowned conferences, seminars, and workshops locally and internationally. Such achievements would not have been possible without the generous contributions of faculty and professionals who worked with us. After all, our hard work and goodwill toward progress is the real metaphor behind the legend of *Prometheus*.

ACADEMIC PROGRAMMING

Architecture Research Forum

Our PhD program's weekly PhD Research Forum lecture series is meant to provide PhD students and faculty with opportunities to learn from and interact with researchers from a host of different backgrounds, and local, national, and international institutions. Here, we provide a list of guest speakers who visited us during the Fall 2017 and the Spring 2018 semesters. All lectures are held at 3410 S. State, a Ludwig Mies van der Rohe-designed building completed in 1952; it was originally known as the Gas Technology Building.

FALL 2017

1 — August 28 “Performance and Sustainability in the Built Environment”

Rahman Azari, Assistant Professor
College of Architecture, Illinois Institute of Technology

2 — September 11 “Digging Canals, Building Civilizations: Architecture and Development Between Mars and Earth”

Alla Vronskaya, Assistant Professor
College of Architecture, Illinois Institute of Technology

3 — September 25 “Potentialities of Group Research”

Kim Soss, Architecture Librarian, Head of the Graham Resource Center
Illinois Institute of Technology

4 — October 03 “Tools for Preservation: The Case of Anthony Overton School”

Paola Aguirre Serrano, Founder
Borderless Studio

5 — October 30 “Sustainable Energy Supplies”

Brent Stephens, Associate Professor
Armour College of Engineering, Illinois Institute of Technology

6 — November 6 “Design Patents”

Catherine Vorwald, Associate Vice Provost
Technology Development, Illinois Institute of Technology;
Nicole Bashor, Partner and Patent Attorney
J.D. Quarles & Brady LLP

7 — November 13 “Palais Garnier: Toward an Architecture of Dance and Music in XIX Century France”

Cynthia Vranas, Director, Mies van der Rohe Society
College of Architecture External Affairs, Illinois Institute of Technology

8 — November 20 “Information Technologies for Communication in Construction”

Ivan Mutis, Assistant Professor
Armour College of Engineering, Illinois Institute of Technology

9 — November 27 “Sustainability: Future Priorities for the Design Industry”

Chris Drew, Director of Sustainability
Adrian Smith + Gordon Gill Architecture

SPRING 2018

10 — January 18 “Landscape and Theatrical Stages: Research on Application of the Space Construction from Theatrical Stage to Contemporary Landscape Spatial Design”

Simin Bian, PhD Candidate
School of Architecture, Tsinghua University

11 — January 25 “The Black Skyscraper: Architecture and the Perception of Race”

Adrienne Brown, Associate Professor, Director of Undergraduate Studies
Department of English Language and Literature, The University of Chicago

12 — February 08 “Chicago / Film / Frame”

Jonathan Miller, Studio Associate Professor
College of Architecture, Illinois Institute of Technology

13 — February 15 “Sensible Designs: A Selection of Counts Studio Projects”

Maria Counts, Assistant Professor
College of Architecture, Illinois Institute of Technology

14 — February 22 “‘Base Falsehoods’ and the Genuine Article: The Visual Economy of San Francisco”

Amy Lippert, Assistant Professor
Department of History, The University of Chicago

15 — March 01 “Housing Surrealism: Sert, Matta, Bonet, 1937-1939”

Ana María León, Assistant Professor
College of Literature, Science, and the Arts, University of Michigan

16 — March 08 “Density and Dwelling: Creating Chicago’s Courtyard Apartment 1891-1929”

Daniel Bluestone, Director, Preservation Studies Program, AMNESP; Professor
History of Art & Architecture Department, Boston University

17 — March 22 “Alternative Modernisms: Post-1967 Architecture in Jerusalem”

Alona Nitzan-Shiftan, Chair
Technion Israel Institute of Technology

18 — March 29 “Urban Utopia”

Luke Leung, PE, LEED Fellow; Director of Sustainable Engineering
Skidmore, Owings & Merrill LLP

19 — April 05 “Construction Management, Engineering, and Support”

David Arditi, Professor and Director, Construction Engineering and Management Program
Armour College of Engineering, Illinois Institute of Technology

20 — April 12 “The Louvre in Abu Dhabi and the Falcons’ Stadium in Atlanta”

Matthew Herman, Adjunct Associate Professor
College of Architecture, Illinois Institute of Technology
Chicago Office Director
BuroHappold Engineering

21 — April 19 “At the Intersection of Architecture and Engineering: Space and Human Habitat”

Edoarda Corradi, Adjunct Professor
Department of Architectural and Environmental Engineering, Illinois Institute of Technology

22 — April 26 “Architectures of Development: Israeli Construction in Africa, 1960s-1970s”

Ayala Levin, Assistant Professor
Weinberg College of Arts & Sciences, Northwestern University

ANNUAL SYMPOSIUM HIGHLIGHTS

Overview

The 2nd PhD Student Symposium, *Chicago Schools: Authors, Audiences, and History*, was organized by PhD Candidates Dan Costa Baciú and Daniel Whittaker under the mentorship of Professor and Dean Michelangelo Sabatino. On the first day, award-winning architectural historian Gwendolyn Wright opened the Symposium by delivering a keynote speech at the Chicago Cultural Center. Papers were presented on the second day at S. R. Crown Hall, IIT. That evening, Whittaker organized a dinner for Symposium participants at the Unity Temple (1908), designed by Frank Lloyd Wright in Oak Park, Illinois. On the final day, participants enjoyed two architectural tours: the Ford House (1949), designed by American architect Bruce Goff in Aurora, Illinois, and the Farnsworth House (1951), designed by Mies van der Rohe in Plano, Illinois.

Photos courtesy of Marcos Petrolí.

2nd International Graduate Student Symposium

Chicago Schools: Authors, Audiences, and History

November 17–19, 2017
S. R. Crown Hall, IIT Campus,
Chicago, IL

Symposium participants in lower core, S. R. Crown Hall.



Participants at the Farnsworth House, designed by Mies van der Rohe in Plano.



Participants in front of S. R. Crown Hall.



Reception and dinner at Unity Temple in Oak Park.



Participants visiting the Ford House, by Bruce Goff in Aurora.

STUDENT LIFE AND RESEARCH

Overview of Doctoral Research

PhD students at IIT spend four to six years completing their studies. During their studies, they participate in many social activities from holiday events to the annual Mies van der Rohe birthday party. The integration of a PhD community contributes to a more pleasant learning environment, where students can share ideas and develop proactive behaviors. Because the majority of the students come from different countries, the PhD program promotes cultural diversity and research, both within and beyond American boundaries. The students enrolled in the PhD program explore the historic and contemporary intersections among Architecture, Culture and Technology through two areas of specialized research: History, Theory, and Criticism (HTC), and Technologies of the Built Environment (TBE). Research topics are based on the expertise of our faculty as well as on the interests of our students.

1 — Narjes Abbasabadi

An Integrated Data-Driven Framework for Urban Energy Use Modeling (UEUM) (2014–19)

2 — Mohammed Ali Khesroh

Engaging Autonomous Species: A Study in the Search of a New Autonomous Construction Method to Serve as a New Design Methodology in Extreme Environments (2016–)

3 — Mohammed H. Alkhabbaz

Leaping Into Modernity: Architecture and Identity in Saudi Arabia, 1962–1986 (2011–18)

4 — Amjad Alkoud

Investigating the Impact of Ultra-Tall Building Ordinances on the Future of Major Cities; Chicago and Dubai (2015–)

5 — Omar Almahdy

Making a Hot-Arid Desert Arab City More Livable: Investigating the Role of Street Design in Enhancing Walkability in Riyadh, Saud Arabia (2015–)

6 — Mehdi Ashayeri

An Agent-Based Framework for Integrated Modeling of Multi-Scale Urban Energy-Air Quality Systems (2015–)

7 — Ezgi Bay

Enhancing Natural Ventilation Through Massing: New Possibilities for Turkish Mass Housing in Hot and Dry Climates (2015–)

8 — Dan Costa Baciu

From Everything Called Chicago School to the Theory of Varieties (2015–18)

9 — Alia Fadel

Transitional Cultured-Nature: A Comprehensive Framework of Biophilic Analysis Investigating On-Campus Restorative Intervals for Student Stress Mitigation (2013–18)

10 — Syan Frey

Darwin's Architects: How the Theory of Evolution Shaped the Chicago School of Architecture (2013–)

11 — Mina Geng

Micro and Vertical Landscape: How the Interior and Vertical Landscape Influence the Microclimate of Building (2017–)

12 — Zahida Khan

Microclimate in Tall Urban Morphology: Study of Open Public Spaces at Street Level as 'Point of Repose' in the Context of Three Cities—Chicago, Dubai, and Mumbai (2017–)

13 — Yohan Kim

Façade Retrofits: Exploring the Impact of New Façade Materials and Systems on Energy Performance of Existing Buildings (2017–)

14 — Anat Mor-Avi

Architecture for the Art of Collaborative Creativity: Engaging Space Attributes as a Catalyst in Forming a Culture of 'WE' for Students and Teachers in Learning Environments (2016–)

15 — Marcos Amado Petrolí

Toward a Civic Monumentality: Arches, Vaults, and Domes in Post-War American Architecture (2016–)

16 — Andres Pinzon Latorre

The Influence of Courtyards: Thermal Comfort Study in Bogotá, Colombia (2012–17)

17 — Gilberto Osornio Nieto

Evaluation of Radiant Cooling Systems Based on the Glazing Façade Ratio in Office Buildings for Hot and Warm Climates: Mexico Study Case (2011–18)

18 — Nadia Shah

From Standardization to Appropriation—A Morphological Study of a Mid-Century Mass Housing Project's Mutation in the Global South (2016–)

19 — Cynthia Vranas

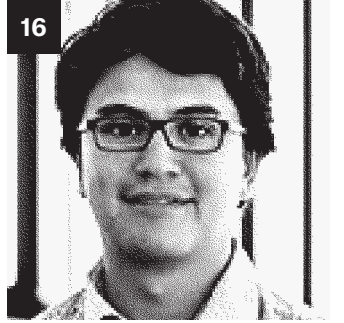
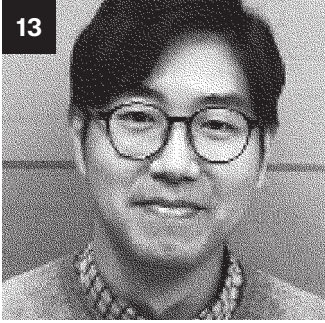
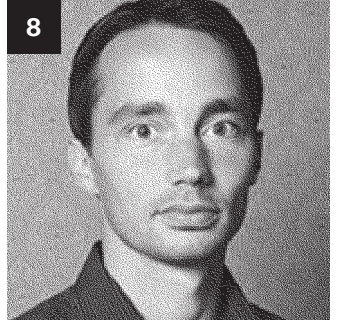
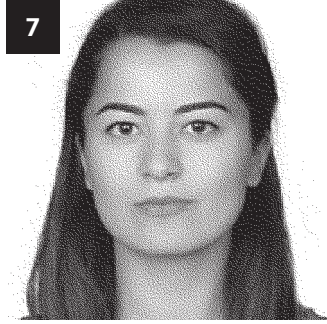
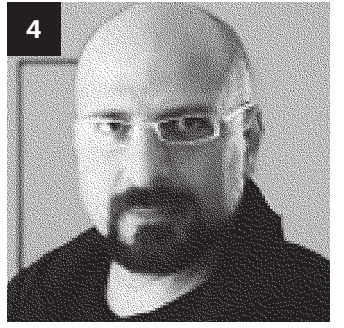
The Arts and Their Interrelation: Architecture, Music, and Dance in 17th-19th Century France (2012–17)

20 — Dan Whittaker

House Museums in Chicago: A Re-Examination of Motives, Origins, and Transformations of the Institution (2015–18)

21 — Yen-Hang Yang

The Experiential Education: The Study of the Students' Learning Outcomes Through 2015 IIT Design/Built Project (2013–)



STUDENT LIFE AND RESEARCH

Building Community

Throughout the academic year, PhD students and faculty take a number of field trips to a host of different places, ranging from professional offices to galleries and libraries. These opportunities allow our students to discover the diverse resources Chicago has to offer, network, and get to know each other.

Photos courtesy of Marcos Petrolí.



PhD Program faculty and students visit the local architectural museum "Building 51."

Dean Sabatino at investiture of the Rowe Family College of Architecture Endowed Chair.





PhD Program faculty and students participate in "Garden Dialogues 2017: Caldwell Farm," Bristol, Wisconsin.

PhD Students participating in a celebration at S. R. Crown Hall to honor John Vinci, a Chicago-based American architect who champions architectural preservation.



ITT PhD Program
HOLIDAY
POTLUCK PARTY.
Dec 2nd, 2017.
Chicago, USA



PhD Program Holiday Party, December 2, 2017. Photo courtesy of Cynthia Vranas.

Andres Pinzon's defense, November 6, 2017, at 3410 S. State St.
Photo courtesy of Andres Pinzon.



Retirement celebration and inauguration of exhibition *Peter Land: Retrospective*, curated by PhD Candidate Omar Almahdy at S. R. Crown Hall.



PhD students at the exhibition
*SOM: Engineering x [Art +
Architecture]*, held by Skidmore,
Owings & Merrill LLP (SOM).

PhD students visiting the 1982
Charnley-Persky House.



John and Jeanne Rowe with
Professor and Dean Sabatino.
Photo courtesy of IIT.

STUDENT LIFE AND RESEARCH

Graduation (2017-18)



Dean Sabatino on stage addressing the graduating class. Photo courtesy of IIT.



Alia Fadel at graduation with Professors Martin Felsen and Ron Henderson. Photo courtesy of Michelangelo Sabatino.

College of Architecture Excellence Awards

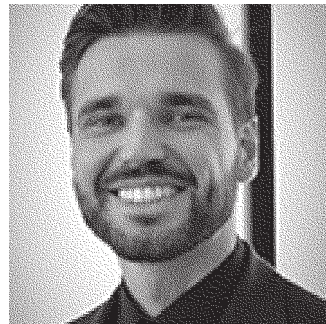
Every year graduating students receive three awards: PhD Program Best Dissertation Award, ARCC King Medal, and Spirit Award.



Fadel, Alia. 2017–18 PhD Program Best Dissertation Award—IIT Faculty Selection Committee.



Alghamdi, Saad. 2017–18 ARCC King Student Medal for Excellence in Architectural and Environmental Research—Named in honor of the late Jonathan King, co-founder and first president of the Architectural Research Centers Consortium (ARCC), this award is given to one student per ARCC member school. Selection of school recipients is at the discretion of the individual institutions, but is based upon criteria that acknowledge innovation, integrity, and scholarship in architectural and/or environmental design research. The award may be made at either the graduate or undergraduate level.



Petroli, Marcos. 2017–18 Spirit Award—Selected by the PhD students in recognition of outstanding contributions to the PhD Program “spirit” of community.

ACCOMPLISHMENTS

This is a summary of PhD student and PhD alumni accomplishments throughout the 2017–18 academic year:

Publications

Azari, Rahman, and Narjes Abbasabadi. "Embodied Energy of Buildings: A Review of Data, Methods, Challenges, and Research Trends." *Energy and Buildings* 168 (2018): 225–35. <https://doi.org/10.1016/j.enbuild.2018.03.003>.

Baciu, Dan Costa, Boris Capitanu, and Eleanor Dickson. "The Chicago School: Evolving Systems of Value." HathiTrust Research Center, 2017. <https://pdfs.semanticscholar.org/198d/5650f823eef7369436df80078a-5f2a9b9034.pdf>.

Hassan, Ahmed Ali. "The Potential Application of Agro-based Polymers in Building Facades: A Framework of Multi-performance Criteria Matrix for Selecting Optimal Materials by the AHP and TOPSIS Methods." *Proceedings of BEST5 - The Building Enclosure Science and Technology*, Philadelphia, Pennsylvania, 2018. https://www.brikbase.org/sites/default/files/Hassan.paper_.pdf.

Petroli, Marcos. "Frontón Recoletos (Madrid, 1935) and Kimbell Museum of Art (Fort Worth/TE, 1972): a Structural Metaphor Towards a New Monumentality." *Proceedings of Interfaces: Architecture, Engineering, Science, Journal of the International Association of Shell & Spatial Structures* (2017): 1–10. <https://www.ingentaconnect.com/content/iass/piass/2017/00002017/00000011/art00015>.

Petroli, Marcos. "Mies in Brazil: Beyond Diplomatic Issues Regarding the US Consulate in Sao Paulo, 1957–62." *Proceedings of XII Docomomo Brazil: Architecture and Urbanism of the Modern Movement* (2017): 1–17. <https://www.12docomomobrasil.com/anais>.

Presentations

Alkoud, Amjad. "On the Impact of Height Limitation Ordinances in Ultra-Tall Buildings." Poster presented at Council on Tall Buildings and Human Habitat Conference, Dubai, UAE, 2018.

Almahdy, Omar. "How Your House is Designed?" Paper presented at Students Educational Forum, University of Illinois at Chicago, 2018.

Baciu, Dan Costa. "Chicago Schools: 150 Years of Publication History." Conference Talk, Chicago Colloquium for Digital Humanities and Computer Sciences, Chicago, Illinois Institute of Technology, November 18, 2017.

Baciu, Dan Costa. "Collaborating with Computer Scientists." Panel Development, Digital Humanities Summer Institute Unconference, Victoria: University of Victoria, June 12–16, 2017.

Baciu, Dan Costa. "Evaluating the History of the Chicago School: Why Supervised Algorithms?" Conference Talk, HathiTrust Research Center UnCamp, Berkeley, University of California, January 25–26, 2018.

Baciu, Dan Costa. "Mining Important Textual Content: A Novel Approach Mimicking Human Associative Memory." Conference Talk, Digital Humanities Summer Institute Colloquium, June 12–16, 2017.

Baciu, Dan Costa. "Sigfried Giedion's Followers: Historiography and the Concept of Departure." Conference Talk, How to Narrate the History of Architecture, Haifa, Technion Israel Institute of Technology, May 7–8, 2018.

Baciu, Dan Costa. "The Chicago School: Evolving Systems of Value." Conference Talk, Digital Architectural History, Zurich, ETH, February 2018.

Baciu, Dan Costa. "The Chicago School: Quantitative and Qualitative Data for a Complex Systems Analysis." Conference Talk, Digital Humanities Summer Institute Colloquium, Victoria: University of Victoria, June 12–16, 2017.

Baciu, Dan Costa. "The Chicago School: Wikification as the First Step in Text Mining in Architectural History." Digital Humanities Summer Institute Colloquium, Victoria, University of Victoria, June 12–16, 2017.

Baciu, Dan Costa. "The Digital Bride and Digitization Takes Command." Conference Talk, *Congress of the Humanities and Social Sciences*, Regina, University of Regina, May 26–June 1, 2018.

Baciu, Dan Costa. "The Pareto Distribution: From Empirical Proposition to Theory." Conference Talk, Networks of Power and Knowledge, Ann Arbor, University of Michigan, March 9–10, 2018.

Fadel, Alia. "The Application of Observation-Based Comprehensive Framework of Biophilic Analysis in Investigating On-Campus Restorative Intervals." Paper presented at the The University of Chicago, Chicago, Illinois, 2018.

Mor-avi, Anat. "The Spirit of 'WE' in Learning Environment – 'WE LEARN' – a Space for Students and Teachers to Become." Conference Presentation, Grand Rapids, Michigan, 2018.

Mor-avi, Anat. "The Spirit of 'WE' in Learning Environment – 'WE LEARN' – a Space for Students and Teachers to Become." Paper presented at Transitions, Melbourne, Australia, University of Melbourne, 2018.

Shah, Nadia. "Housing for All in India—as a Sustainable Development Goal." Paper presented at Year of India Conference, Kennesaw, Georgia, Kennesaw State University, 2018.

Whittaker, Daniel. "Conserving Ando's Concrete in Chicago." Paper presented at the Association for Preservation Technology (APT) Western Great Lakes Chapter & Docomomo US/Chicago, Illinois Institute of Technology, Chicago, Illinois, 2018.

Whittaker, Daniel. "Pursuing elusive historical narratives in Chicago: Adventures in the Archives." Conference Talk, Washington University in Saint Louis, St. Louis, Missouri, 2018.

Whittaker, Daniel. "The Clarke House: A Politicized History." Paper presented at the Architecture and Civil Engineering Conference (ACE), Singapore, May 14–15, 2018.

Awards, Fellowships, Grants, and Scholarships

Abbasabadi, Narjes. 2nd Place. Race to Zero Student Design Competition, US Department of Energy, National Renewable Energy Laboratory, Golden, Colorado, April 20–22, 2018.

Abbasabadi, Narjes. “Hard Work, Dedication and Commitment to Excellence Award.” Adrian Smith + Gordon Gill Architecture, Chicago, Illinois, 2018.

Alkoud, Amjad. Scholarship Winner. Construction Specification Institute, Chicago, Illinois, 2018.

Baciu, Dan Costa. “Sigfried Giedion’s Chicago School: A Midpoint in 150 Years of Reception History.” Swiss National Science Foundation, Grant Nr. 174883.

Khan, Zahida. Travel Grant. International Doctoral Workshop, Tongji University, Shanghai, China, July 1–13, 2018.

Kim, Yohan. 1st Place (\$5,000). Chicago Committee on High-Rise Buildings Scholarship, Chicago, Illinois, 2018.

Petroli, Marcos. “Student Delegate.” Chicago Forum on Global Cities, Chicago, Illinois, June 6–8, 2018.

Shah, Nadia. Travel Grant. International Doctoral Workshop, Tongji University, Shanghai, China, July 1–13, 2018.

Defended Dissertations

During this past year, six PhD students successfully defended their dissertations.

Alkhabbaz, Mohammed H. “Leaping into Modernity: Petro-Islamic Architecture in Saudi Arabia, 1962–1986.” PhD diss., Illinois Institute of Technology, 2018. Committee: Michelangelo Sabatino (chair), Mahjoub Elnimeiri, Maureen Flanagan, Robert Krawczyk, and Alla Vronskaya.

Baciu, Dan Costa. “From Everything Called Chicago School to the Theories of Varieties.” PhD diss., Illinois Institute of Technology, 2018. Committee: Michelangelo Sabatino (chair), Harry F. Mallgrave, Vedran Mimica, and Alla Vronskaya.

Fadel, Alia. “Transitional Cultured-Nature: A Comprehensive Framework of Biophilic Analysis Investigating On-Campus Restorative Intervals for Student Stress Mitigation.” PhD diss., Illinois Institute of Technology, 2018. Committee: Martin Felsen (chair), Nicole Ditchman, Ronald Henderson, Michelangelo Sabatino, and Christena Nippert-Eng (external).

Osornio Nieto, Gilberto. “Evaluation of Radiant Cooling Systems Based on the Glazing Facade Ratio in Office Buildings for Hot and Warm Climates: Mexico Study Case.” PhD diss., Illinois Institute of Technology, 2018. Committee: Matthew Herman (chair), Robert Krawczyk, Michelangelo Sabatino, Brent Stephens, and Bernardo Vazquez (external).

Pinzon Latorre, Andres. “The Influence of Courtyards: Thermal Comfort Study in Bogota, Colombia.” PhD diss., Illinois Institute of Technology, 2017. Committee: Peter Land (chair), Matthew Herman, Michelangelo Sabatino, and Brent Stephens.

Vranas Olsen, Cynthia. “The Palais Garnier: Toward an Architecture of Dance and Music in XIX Century France.” PhD diss., Illinois Institute of Technology, 2017. Committee: Joseph Clark (co-chair), Michelangelo Sabatino (co-chair), Ruth Abramovich, Dirk Denison, Vedran Mimica, and John Snapper.

Visiting Scholar Spring 2018

Bian, Simin. PhD Candidate, Tsinghua University. She received her PhD with Professor Zhu Yufan of Tsinghua University in September 2019.

Recent Alumni News

Graduates of IIT’s PhD Program in Architecture typically pursue academic careers in universities, obtain positions in research institutions, or return to professional practice.

Alghamdi, Saad. Former Assistant Professor in Architecture, College of Engineering, Alfaisal University, Riyadh, Saudi Arabia. Currently Deputy CEO, Aseer Development Authority, Saudi Arabia.

Alkhabbaz, Mohammed H. Assistant Professor in Architecture, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.

Baciu, Dan Costa. Postdoctoral Student, University of California, Santa Barbara.

Hassan, Ahmed Ali. Architect & Facade Consultant, Adrian Smith + Gordon Gill Architecture, Chicago, Illinois.

Jones, Kristin. Co-curator of the exhibition “Mies’ Pedagogy: Visual Training, Collages, and Space Models,” Mies van der Rohe Society exhibit, Illinois Institute of Technology, Chicago, March 22, 2018.

Osornio Nieto, Gilberto. Senior CFD engineer at BuroHappold in Leeds, England.

Vranas Olsen, Cynthia. Director of Mies van der Rohe Society, College of Architecture External Affairs, Illinois Institute of Technology, Chicago.