

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 — Amjad Alkoud

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

3 — 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–)

4 — Mehdi Ashayeri

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

5 — Ezgi Bay

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

6 — Syan Frey

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

7 — Mina Geng

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

8 — Liwen Kang

Public Health and Built Environment: Natural Based Solution to Improve Human Health, Experience, and Well-Being in Metropolitan Areas (2018–)

9 — Piyush Khairnar

Applications of Carbon Composites: A Study in Structural and Architectural Applications of Carbon Fiber Composites in Tall Buildings (2018–)

10 — 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–)

11 — Yohan Kim

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

12 — Lijian Ma

Public Health and Built Environment: Natural Based Solution to Improve Human Health, Experience, and Well-Being in Metropolitan Areas (2018–)

13 — Lobna Mitkees

Cultural Preservation and Energy Conservation (2018–)

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 Petroli

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

16 — Nadia Shah

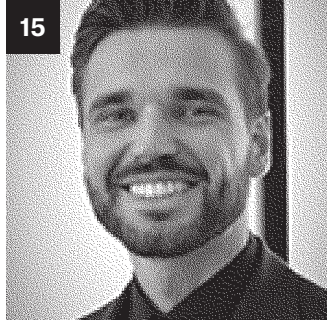
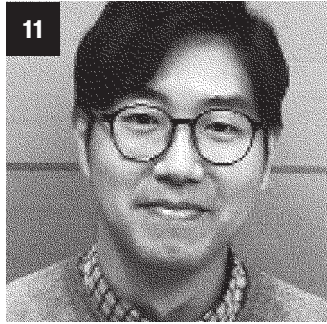
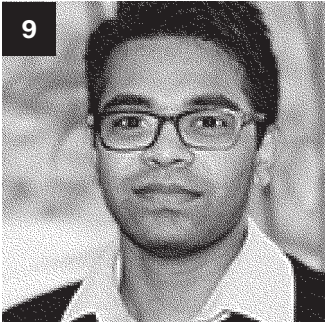
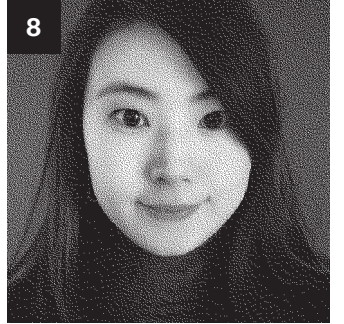
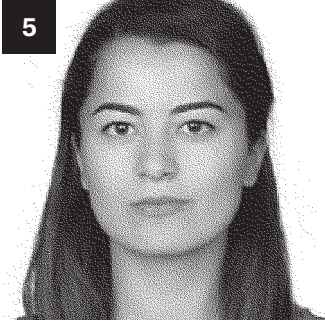
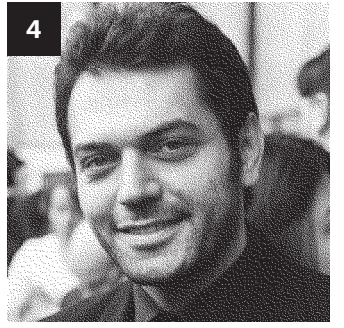
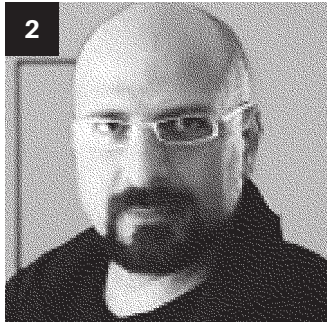
From Standardization to Appropriation—A Morphological Study of a Mid-Century Mass Housing Project's Mutation in the Global South (2016–)

17 — Dan Whittaker

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

18 — 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.



Marcos Petrolí's wedding, St. Clement Church, Chicago, May 10, 2019. Photo courtesy of Dan Whittaker.

PhD Open House, S.R. Crown Hall, May 10, 2019.



Dean Sabatino introducing
the dedication of PhD Seminar
Room to Myron Goldsmith
(ARCH 1939, MS 1953).



Dedication of Myron Goldsmith PhD Seminar Room, September 14, 2018 (3410 S. State St., IIT).



Attendees at the dedication
ceremony. Professor David Sharpe
and Robyn Goldsmith, seated.



Dedication ceremony, Eran Meir,
Violoncello (VanderCook College
of Music, IIT campus).

STUDENT LIFE AND RESEARCH

Graduation (2018-19)

Photos courtesy of Marcos Petrolí.

Dean Sabatino with Narjes Abbasabadi.



View of graduating students in S.R. Crown Hall.

Dan Whittaker with Dean Sabatino and Professor Snapper.



College of Architecture Excellence Awards

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



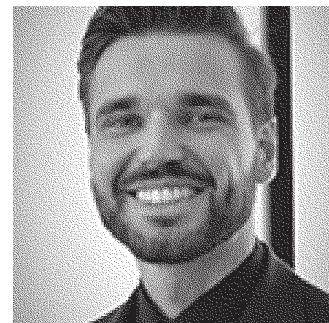
Abbasabadi, Narjes. 2019 PhD Program Best Dissertation Award—IIT Faculty Selection Committee.



Whittaker, Daniel. 2019 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.



Mitkees, Lobna. 2019 Spirit Award—Selected by the PhD students in recognition of outstanding contributions to the PhD Program “spirit” of community.



Petrol, Marcos. 2019 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 2018–19 academic year:

Publications

Abbasabadi, Narjes. "A Data-Driven Framework for Urban Building Operational Energy Use Modeling." *Proceedings of 2019 Symposium on Simulation for Architecture & Urban Design* (2019): 71–77.

Abbasabadi, Narjes, and Mehdi Ashayeri. "Urban Energy Use Modeling Methods and Tools: A Review and an Outlook." *Building and Environment* 161 (August 2019): 106270.

Abbasabadi, Narjes, Mehdi Ashayeri, Rahman Azari, Brent Stephens, and Mohammad Heidarnejad. "An Integrated Data-Driven Framework for Urban Energy Use Modeling (UEUM)." *Applied Energy* (July 2019), 253:113550.

Abbasabadi, Narjes, and Rahman Azari. "A Framework for Urban Building Energy Use Modelling." *Proceedings of the ARCC 2019 International Conference, The Future of Praxis: Applied Research as a Bridge Between Theory and Practice* (2019): 386–94.

Garcia-Requejo, Zaida. "Learning with Mies. The Universal Space of Louis Roeh." *EN BLANCO Revista de Arquitectura*, no. 24 (2018): 96–103.

Garcia-Requejo, Zaida (co-author). "The museum in the educational architecture of Mies van der Rohe: The Festival of Art." *BAC Boletín Académico*, no. 9 (2019, anticipated).

Jones, Kristin. "From Critical to Transformative Pedagogy in Architectural Education." In 1st ACSA/EAAE Biennial Teacher's Conference. *Proceedings of The Teacher's Hunch; Practice of Teaching | Teaching of Practice*, Antwerp, Belgium, ACSA, June 28–29, 2019.

Pinzon, Andres, Carolina Rodriguez, and Juan Medina. "Thermal Comfort and Satisfaction in the Context of Social Housing: Case Study in Bogotá, Colombia." *Journal of Construction in Developing Countries* (2019, anticipated).

Pinzon, Andres, and Rafael Villazon. *Luz/Materia - Estrategias Projectuales para la Iluminación de Espacios Arquitectónicos - Light/matter. Project strategies for day-lighting of architectural spaces.* Bogotá: Ediciones Uniandes, 2018.

Presentations

Abbasabadi, Narjes. "An Integrated Framework for Urban Energy Use Modeling: Applications of Artificial Intelligence." Conference-talk, AI@IllinoisTech Collaboration Day, the Active Computational Thinking (ACT) Center, the Department of Computer Science, Illinois Institute of Technology, Chicago, Illinois, January 25, 2019.

Abbasabadi, Narjes. "An Integrated Data-driven Framework for Urban Energy Use Modeling." Energy-Efficient and Grid-Interactive Buildings, the Rosenfeld Symposium, Lawrence Berkeley National Laboratory, Berkeley, California, April 23, 2019.

Ashayeri, Mehdi. "A Hybrid Data-driven and Simulation-based Framework for Analyzing Energy and Indoor Air Quality." Energy-Efficient and Grid-Interactive Buildings, the Rosenfeld Symposium, Lawrence Berkeley National Laboratory, Berkeley, California, April 23, 2019.

Ezgi, Bay. "Life in a High-Rise: Surveying Opinions and Expectations on Social Housing in Turkey." Paper presented at Architectural Research Centers Consortium International Conference, Ryerson University, Toronto, Canada, 2019.

Hassan, Ahmed Ali. "Between Revealing and Concealing: The Poetic Potentials of Architectural Lighting in Exhibiting Meaning, Creating Rhythm, and Supporting the Dramatic and Monumental Values of Historic Buildings." Paper presented at House of Egyptian Architecture, Ministry of Culture, Egypt, 2019.

Jones, Kristin (co-author). "The Legendary Design(er) of the Frankfurt Kitchen." Spring Lecture, Chicago Women in Architecture with Docomomo Chicago and Goethe Institute, Eggersmann Kitchens and Home Living, Chicago, Illinois, May 9, 2019.

Khan, Zahida. "Human Behavior Simulation for Public Spaces in Tall Urban Morphology: An AI Approach to Microclimatic Study." Lecture, Illinois Institute of Technology, Chicago, Illinois, January 25, 2019.

Ma, Lijian. "Advanced Technology of Building Skins." Lecture, Illinois Institute of Technology, Chicago, Illinois, May 9, 2019.

Mitkees, Lobna, Bi Pengxiang, and Xu Yipin. "How Does the Super-High Building Affect the Value of Surrounding Land." Conference Talk, 2019 Future City and Architecture, College of Architecture & Urban Planning, Tongji University, Shanghai, China, June–July 2019.

Pinzon, Andres, and Lisa White. "Shading Calculations for Passive House—Accuracy Matters! The new PHIUS+ 2018 shading Calculation Methodology." Conference-talk, 13th Annual North American Passive House Conference, Boston, Massachusetts, September 21–22, 2018.

Vranas Olsen, Cynthia, Kristin Jones, and Zaida Garcia-Requejo (curators). "Bauhaus Descendants: Stories from the Archives." Mies van der Rohe Society exhibit, Illinois Institute of Technology, Chicago, Illinois, March 28, 2019.

Whittaker, Daniel. "Historical Lessons From 1920s–1950s High-Rise Multi-Family Construction Projects in Chicago, Illinois." Paper presented at CTBUH, Middle East Conference, Dubai and Abu Dhabi, UAE, October 20–25, 2018.

Awards, Fellowships, Grants, and Scholarships

Abbasabadi, Narjes. "ARCC 2019 Best Paper Award Candidate," based on peer review process.

Abbasabadi, Narjes. A select audience for the 2019 Art Rosenfeld Symposium on Energy Efficient and Grid Interactive Buildings and the so-called "The Next Art Rosenfelds," Lawrence Berkeley National Lab, Berkeley, CA, 2019.

Abbasabadi, Narjes. Completion of workshop for developing research agendas on "Sustainable Urban Systems: Predictive, Interconnected, Resilient, and Evolving," organized by Northwestern University, Argonne National Laboratory, the University of Chicago, Illinois Center for Urban Resilience and Urban Sustainability with support from the National Science Foundation.

Abbasabadi, Narjes. Conference Fellowship. Energy-Efficient and Grid-Interactive Buildings, the Rosenfeld Symposium, Lawrence Berkeley National Laboratory, Berkeley, California, April 23, 2019.

Abbasabadi, Narjes. Peer-Reviewer, *Applied Energy Journal*, Elsevier B.V., 2019.

Abbasabadi, Narjes. Peer-Reviewer, *Building and Environment Journal*, Elsevier B.V., 2019.

Abbasabadi, Narjes. Travel Grant, College of Architecture, Illinois Institute of Technology, Chicago, Illinois, 2019.

Abbasabadi, Narjes. Travel Grant, SimAUD Conference, College of Architecture, Illinois Institute of Technology, Chicago, Illinois, 2019.

Ashayeri, Mehdi. A select audience for the 2019 Art Rosenfeld Symposium on Energy Efficient and Grid Interactive Buildings and the so-called "The Next Art Rosenfelds," Lawrence Berkeley National Lab, Berkeley, CA, 2019.

Ashayeri, Mehdi. Completion of workshop for developing research agendas on “Sustainable Urban Systems: Predictive, Interconnected, Resilient, and Evolving,” organized by Northwestern University, Argonne National Laboratory, the University of Chicago, Illinois Center for Urban Resilience and Urban Sustainability with support from the National Science Foundation.

Ashayeri, Mehdi. Conference Fellowship. Energy-Efficient and Grid-Interactive Buildings, the Rosenfeld Symposium, Lawrence Berkeley National Laboratory, Berkeley, California, April 23, 2019.

Ashayeri, Mehdi. Peer-Reviewer. Advances in Building Energy Research, Taylor & Francis Group, 2019.

Ashayeri, Mehdi. Peer-Reviewer. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers, 2018.

Ashayeri, Mehdi. Peer-Reviewer. GreenBuild International Conference and Expo, 2019.

Ashayeri, Mehdi. Travel Grant, College of Architecture, Illinois Institute of Technology, Chicago, Illinois, 2019.

Bay, Ezgi. Certificate of Appreciation. US National Science Foundation-Sponsored National Workshop on Architectural Faculty in Environmental Sustainability Research, May 28–29, 2019.

Bay, Ezgi. “Student Delegate.” The Chicago Council on Global Affairs, June 5–7, 2019.

Fadel, Alia. “Illinois Tech Alumna Receives Honorable Mention from ARCC.” Online Published Interview, College of Architecture, Illinois Institute of Technology, Chicago, Illinois, May 3, 2019.

Mitkees, Lobna. “Completion with Honor.” 2019 Future City and Architecture, College of Architecture & Urban Planning, Tongji University, Shanghai, China, June–July 2019.

Petroli, Marcos. Call for Papers Chair. Annual Docomomo National Symposium, Docomomo US, June 3–6, 2020 (anticipated).

Petroli, Marcos. Peer-Reviewer. Association of Collegiate Schools of Architecture, 108 Annual Meeting, 2019.

Defended Dissertations

During this past year, two students successfully defended their dissertations:

Abbasabadi, Narjes. “An Integrated Data-Driven Framework for Urban Energy Use Modeling (UEUM).” PhD diss., Illinois Institute of Technology, 2018. Committee: Michelangelo Sabatino (chair), Rahman Azari, Mahjoub Elnimeiri, Brent Stephens, and Mohammad Heidarnejad.

Whittaker, Daniel. “House Museums in Chicago: A Re-examination of Motives, Origins, and Transformations of the Institution.” PhD diss., Illinois Institute of Technology, 2018. Committee: Michelangelo Sabatino (chair), Ron Henderson, Dirk Denison, Andrew Schachman, and John Snapper.

Visiting Scholars 2018–2019

Bhalla, Ankit. PhD Candidate, Department of Architecture and Planning, Indian Institute of Technology Roorkee. “India’s Endeavor in Mitigating Climate Change.”

Yarımbaş, Duygu. PhD Candidate in Architecture Faculty at Istanbul Technical University; Research Assistant in Architecture Department at Mimar Sinan Fine Arts University. “Capturing the Archive, Addressing the Media: The Construction of Professional Identity in Architecture.”

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.

Abbasabadi, Narjes. Adjunct Professor, College of Architecture, Illinois Institute of Technology, Chicago, Illinois.

Abbasabadi, Narjes. Architect, Adrian Smith + Gordon Gill Architecture, Chicago, Illinois.

Abbasabadi Narjes. Assistant Professor, College of Architecture, Planning and Public Affairs, University of Texas Arlington.

Fadel, Alia. Adjunct Assistant Professor, The American University in Cairo (AUC), Cairo, Egypt.

Fadel, Alia. Biophilic Design Consultant and Ethnographic Observation Specialist, Cairo, Egypt.

Garcia-Requejo, Zaida. Part-Time Professor in Architectural Composition, School of Architecture, University of A Coruña, A Coruña, Spain.

Hassan, Ahmed Ali. Adjunct Assistant Professor, Department of Architectural Engineering and Environmental Design, College of Engineering and Technology, Arab Academy for Science, Technology & Maritime Transport University (AASTMT), Cairo, Egypt.

Hassan, Ahmed Ali. Assistant Professor, Department of Architecture, College of Engineering, Helwan University, Cairo, Egypt.

Hassan, Ahmed Ali. Director of Design, BIM & Sustainability, Progressive Architects, Cairo, Egypt.

Jeong, Hyesun. Assistant Professor, College of Architecture, Planning and Public Affairs, University of Texas Arlington.

Pinzon, Andres. Certification Team Member, Passive House Institute US (PHIUS), Chicago, Illinois.

Whittaker, Daniel. Exhibit coordinator. Alphawood Exhibitions, Chicago, Illinois.