PHD PROGRAM OVERVIEW 2021–23

Two Years in Perspective

Curator

Alejandro Saldaña Perales,
PhD Candidate + PhD Program Administrative Assistant
Illinois Institute of Technology

The unprecedented health crisis that took the world by storm, COVID-19, is no longer an unwelcome visitor. Nowadays, despite ever-present health concerns, COVID has become treatable. More a nuisance and inconvenience than a menace, overcoming this pandemic has been a testament to humankind's ability to overcome unforeseen challenges and forge its own destiny.

This issue of *Prometheus*, not being excluded from the effects from the pandemic, saw its progress halted. What was normally a yearly effort got red flagged only to restart the following year. Just once, a yearly publication became a biannual edition. This led all of us to appreciate the opportunity and privilege of being part of this scholarly effort.

The 2021–22 and 2022–23 academic years have been unique. In-person activities have resumed, and we are constantly mindful of the privileges of meeting with colleagues, friends, and loved ones. Remote work has matured, expanding our networks, research scope, as well as our productivity. It has given us the opportunity to work from home, restaurants, trains, planes, automobiles, parks, plazas, beaches, balconies, and rooftops, granted there's access to Wi-Fi. Hybrid work is a staple of our daily lives. It has provided us with the opportunity to choose not only when and where we work but also fosters mindfulness over how and why we work.

Our research is continuously shaped by the lingering forces challenging the contemporary urban landscape all over our world. A spectrum of issues, spanning global, national, regional, and local scales, is assessed through an Architectural lens. These critical matters guide our current work. The ongoing research developed at IIT Architecture acknowledges the elements that will continue to shape our urban landscapes, from Chicago — our kind of town — to the world.

PhD students and candidates share ideas with Jonathan Harmon during one of the weekly Architecture Research Forum sessions, September 2, 2021.

The end of the Spring 2022 term signaled the departure of three members of our community who have successfully fulfilled all the academic requirements and graduated from the PhD Program in May 2022. October 2022 marked the saddest chapter in the history of the program. The untimely loss of our beloved colleague and friend Lobna Mitkees had a profound impact on all of us. She is, and will always be, dearly missed. Furthermore, May 2023 will see four of us fulfilling all requirements and becoming scholars. In transcending from the PhD program, our colleagues' departures work as a reminder of how ephemeral this challenging journey truly is. Their achievements are also testimony of what is in store for us as well. Achievements attained only by commitment and hard work. Although we will miss them, we know their paths shall be ours too. We are proud of our new generation of architectural scholars.

Above: Class of 2022 PhD graduates and faculty pose for a picture right before their Commencement Ceremony, May 14, 2022.

Left: Members of the PhD Community–students and faculty–gather for snacks and coffee at S. R. Crown Hall during the PhD Holiday Party, December 19, 2022.

ACADEMIC PROGRAMMING HIGHLIGHTS

In this issue, we proudly share a record of our lectures. These took place on Thursdays at 5 p.m.

From Architectural Research Forum to The Research Forum Podcast

The weekly lecture series of the PhD Program, the Architectural Research Forum, is a platform allowing our students to interact, network, and share their work with guests. The PhD Forum, as it is also known, is meant to cover highly diverse and specific issues ranging from architecture, urban design and city policy, to building technologies, and landscape architecture. In accordance with the shifting policies regarding COVID-19 in place since 2020, the Forum has gone hybrid. In turn, this has provided the opportunity to reach out to more diverse academic cohorts and feature guests whom, under previous conditions, would have been difficult to welcome. The forum's focus also turned into the work of our very own students, highlighting the most recent developments in their research. Working in a collaborative fashion, each session sparked debates and conversations fostering new ideas and creative research frameworks worth exploring. In parallel, like the rest of IIT's faculty, staff, and students in late 2021, we were excited to go back to campus. What better way to do this than to arrive at a brand new studio and seminar room!

The new PhD facilities are located in the Mies van der Rohe design building at 3410 S. State St. Tech Park North, formerly IIT Institute of Gas Technology. Our PhD Studio is located in Room 103, and the new PhD Seminar Room is located in Room 112. Students are encouraged to select their new workstations and free to access the new studio at will to conduct their research in an invigorating new space. Furthermore, the year 2022 saw our PhD Forum transcend from a lecture series towards a podcast-oriented conversation featuring new lines of research in architecture. This now bi-weekly Forum welcomes a wide array of architecture students, and those of affiliated disciplines, to engage with our conversations both live and in a digital format through Spotify. Each session is being recorded from the inside of S. R. Crown Hall, in a similar fashion to Mies' lectures during his tenure at IIT College of Architecture decades ago. A couple of lounge chairs, a coffee table, and a microphone are all that is needed to complement a pleasant conversation between our guests and our host, Alejandro Saldaña Perales (PhD Candidate).

An attentive audience listens and absorbs Jeffrey A. Wolin's lecture, September 9, 2021.

FALL 2021

Chicago Stories: Multidisciplinary Conversations About Chicago
Curated by Dr. Michelangelo Sabatino and Alejandro Saldaña Perales

1 — August 26 "Welcome Back & Introductory Lecture 'The PhD Dissertation Demystified'"
Hosted by Dr. Michelangelo Sabatino, Professor and PhD Program Director at the College of Architecture
Illinois Institute of Technology
Dr. Dan Whittaker (PhD '18), Senior Lecturer in Architecture and Sustainable Design
Singapore University of Technology and Design

2 — September 2 "Crafting a PhD Thesis"
Jonathan Harmon, Thesis Examiner & Graduate Services Specialist
Illinois Institute of Technology

3 — September 9 "The Indiana Limestone: A Photographic Essay"
Jeffrey A. Wolin, Ruth N. Halls Professor Emeritus of Photography
Indiana University, Bloomington, IN

4 — September 16 "Frank L. Wright and the Architects of Steinway Hall: A Study in Collaboration"
Stuart Cohen, Professor Emeritus at the School of Architecture
University of Illinois at Chicago

5 — September 23 "The Oak Park Studio of Frank Lloyd Wright"
Dr. Lisa D. Schrenk, Associate Professor of Architectural History at the College of Architecture, Planning and Landscape Architecture
Arizona State University, Tempe, AZ

6 — September 30 "Frank Lloyd Wright's Unity Temple"
Dr. David M. Sokol, Professor Emeritus of American Art, Modern Art, and Museology at the School of Art and Art History, College of Architecture, Design, and the Arts
University of Illinois at Chicago

7 — October 7 "Post-War Chicago Architecture: The Residential Tall Building"
Dr. Thomas Leslie, Morrill Professor & Pickard Chilton Professor at the College of Design
Iowa State University, Ames, IA

8 — October 14 "Lakefront: Public Trust and Private Rights in Chicago"
Dr. Joseph Kearney, Dean and Professor at the Marquette University Law School
Marquette University, Milwaukee, WI
Thomas W. Merrill, J.D., Charles Evans Hughes Professor of Law at Columbia Law School
Columbia University, New York, NY

9 — October 21 "Myron Goldsmith: Between Pedagogy and Practice"
Dr. Marc Neveu, Professor and Head of the Architecture Program at The Design School
Arizona State University, Tempe, AZ
Dr. Edmond P. Saliklis, Professor of Architectural Engineering at the College of Architecture and Environmental Design
California Polytechnic State University, San Luis Obispo, CA

10 — October 28 "The Other Redlining: Blight on the Near West Side from Jane Addams to the University of Illinois"
Dr. Ann Durkin Keating, Dr. C. Frederick Toenniges Professor of History
North Central College, Naperville, IL
Rima Lunin Schultz, Author and Independent Researcher

11 — November 4 "Chicagoland Prize Homes"
Dr. Siobhan Moroney, Associate Professor of Politics, Chair of American Studies, and Chair of Legal Studies
Lake Forest College, Lake Forest, IL

12 — November 11 "The Interrelationship of Building Performance, Human Health, and Real Estate Economics"
Dr. Irmak Turan, Assistant Professor at the College of Architecture
Illinois Institute of Technology

13 — November 18 "Spaces of Hypercreativity"
David Dewane, Adjunct Professor at the College of Architecture
Illinois Institute of Technology

14 — December 2 "Guide to Chicago's Twenty-First-Century Architecture"
John Hill, Author and Editor-in-Chief
World-Architects.com, New York, NY

SPRING 2022

IIT PhD Community; Research in Progress

1 — January 13 "PhD Welcome Back"
Dr. Michelangelo Sabatino, Professor and PhD Program Director at the College of Architecture
Illinois Institute of Technology

2 — January 20 "Research & Reflections"
Dr. María Villalobos Hernández, Assistant Professor at the College of Architecture
Illinois Institute of Technology

3 — January 27 "Carbon Fiber Composite as a Primary Structural Material in Tall Buildings"
Piyush Khairnar, PhD Candidate at the College of Architecture
Illinois Institute of Technology

4 — February 3 "The Feasibility of Double-Skin Facades to provide Natural Ventilation in Tall Office Buildings"
Yohan Kim, PhD Candidate at the College of Architecture
Illinois Institute of Technology

5 — February 10 "A BIM-Based Life Cycle Assessment Tool of Embodied Energy and Environmental Impacts of Reinforced Concrete Tall Buildings"
Lijian Ma, PhD Candidate at the College of Architecture
Illinois Institute of Technology

6 — February 17 "Human Behavior and Microclimates: An ABM Approach to Integrate Outdoor Thermal Comfort in Human Spatial Behavior Simulation"
Zahida Khan, PhD Candidate at the College of Architecture
Illinois Institute of Technology

7 — February 24 — DOUBLE FEATURE
"Thermal Comfort and the Application of Personal Comfort Systems (PCS) in S. R. Crown Hall"
Lobna Mitkees, PhD Candidate at the College of Architecture
Illinois Institute of Technology
"Modern Eclecticism: Carlo Mollino Architect & Designer"
Dr. Michelangelo Sabatino, Professor and PhD Program Director at the College of Architecture
Illinois Institute of Technology

8 — March 3 "Investigating the Impact of Ultra-Tall Buildings Ordinance on the Future of Major Cities"
Amjad Alkoud, PhD Candidate at the College of Architecture
Illinois Institute of Technology

9 — March 10 "Parks Take Command: Framing Chicago's Public-Space-Centered Private Development Design in `Bronzeville Lakefront'"
Alejandro Saldaña Perales, PhD Student at the College of Architecture
Illinois Institute of Technology

10 — March 24 "Function Follows Food: An Ecological Civic Structure Facilitating Food Behavior Through Aromatics in Chicago's Douglas Neighborhood"
Jati Zunaibi, PhD Student at the College of Architecture
Illinois Institute of Technology

11 — March 31 — DOUBLE FEATURE
"Post-War Italian Design"
Lorenzo Mingardi, PhD Scholar in transit towards his PhD Storia dell'architettura degree at the Dipartimento di Architettura
Università degli Studi di Firenze, Florence, Italy
"The Feasibility of Biomorphic Honeycomb Facade to Enhance Daylighting Energy Saving for High Rise Building"
Mina Geng, PhD Candidate at the College of Architecture
Illinois Institute of Technology

12 — April 7 — DOUBLE FEATURE
[PR]"Arte e Arquitetura: Uma relação possível"
[EN]"Art and Architecture: A Possible Relation"
Valentina Martins Marques, PhD Scholar in transit towards her PhD degree at the Programa de Pesquisa e Pós-Graduação em Arquitetura
Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
"The Efficient Strategy of Passive Cooling Design to maintain Indoor Thermal Comfort: A Case Study in Hot-Dry Climate"
Aamena Bakarmom, PhD Student at the College of Architecture
Illinois Institute of Technology

13 — April 14 "The Driverless City: The Urban Design implication of Autonomous Ubiquitous Robots and Navigation Safety"
Alexis Arias Betancourt, PhD Student at the College of Architecture
Illinois Institute of Technology

14 — April 21 "The Impacts of Built Environment on Health: General, Mental, and Physical Well-Being Benefits of Urban Green Spaces (UGS)"
Liwen Kang, PhD Candidate at the College of Architecture
Illinois Institute of Technology

15 — April 28 "Analysis of Optimization Natural Light by using Kinetic Shade System in Orthogonal Plan of High-Rise Office Buildings in Dallas and Boston"
Donghyun Lee, PhD Student at the College of Architecture
Illinois Institute of Technology

Left: PhD Program alum, Dr. Syan Frey, presents Dr. Sabatino with a gift during the PhD Holiday Party, December 2, 2021.

Below: Piyush Khairnar (third from right) poses for a photo with faculty and colleagues after having successfully defended his dissertation, April 12, 2022.

Çiçek Karatas (far right) introduces herself and explains her previous professional and academic experience to members of the IIT Architecture PhD Community at the Welcome Back Party, August 25, 2022.

Members of the PhD Community pose with Zach Mortice (third from right) in a local pizzeria after the recording of The Research Forum podcast, October 20, 2022.

Newly appointed Dr. Zahida Khan and her daughter (center) pose for a picture with members of Khan's thesis committee after having successfully defended her dissertation, December 2, 2021.

Dr. Michelangelo Sabatino lectures on his most recent professional endeavor at the Frederick Law Olmsted Society of Riverside Annual Meeting, January 20, 2023.

FALL 2022

The Research Forum Podcast: Open Media and New Research

This Forum centers on the broader spectrum of research traditionally sidelined by scholarly inquiries. This research, employing new and diverse media, is within reach of much larger populations than traditional scientific sources or material. By focusing on popular open-source research, we aim to highlight its value as a source towards scientific pursuits. This season of the IIT Architecture PhD Research Forum aims to use Chicago as a case study.
Curated and hosted by Alejandro Saldaña Perales, PhD Candidate

1 — September 8 "Coby Lefkowitz: Urbanist, Developer, Writer, and Optimist"

Lefkowitz is the Principal & Co-Founder at Backyard, an online real estate tool. Similarly, he is content creator at Our Built Environment, an online journal exploring how to create better places for all in our shared built environment through the lens of urban planning, real estate development, and placemaking. Finally, he also hosts a successful Twitter account (@Cobylefko) with over 15,000 followers, where he aims to create thoughtfully designed cities and better places to live.

2 — September 22 "Jacob Lewis-Hall: Then & Now Chicago"

Jacob Lewis-Hall is content creator at the popular Instagram account Then & Now Chicago (@thenandnowchicago), a picture-based journal exploring Chicago's architectural legacy and urban history. Lewis-Hall's interest lies in the life of some of the often overlooked architectural masterpieces of Chicago through the years. The account explores and compares the original state of the architecture and highlights their transformations.

3 — October 6 "Adam Paul Susanek: Segregation By Design"

Susanek is a project manager at AECOM, and the founder and administrator of Segregation by Design (https://www.segregationbydesign.com/ @segregation_by_design). His work reveals the transformation of North American urban landscapes throughout the twentieth century. Within it, Susanek highlights the effects of projects such as urban renewal programs and the U.S. Federal Highway program.

4 — October 20 "Shermann 'Dilla' Thomas: @6figga_dilla"

Shermann 'Dilla' Thomas is a Chicago historian and ambassador, Chicago Mahogany Tours historian, and TikTok (@6figga_dilla) superstar. Dilla, who considers himself a public historian, has a degree in English and African American studies from Eastern Illinois University. He has been voted Chicago Reader Magazine's 2021 Best Chicago TikTok account and Best Chicago Twitter account. His work sheds light over the diverse and sometimes conflictive history of the city. Dilla's work ranges from local historical characters to events. Similarly, his work heavily features Chicago's urban landscape: its architectural and urban achievements, as well as the development of its many neighborhoods and communities.

5 — October 27 "Stewart Hicks: Architecture with Stewart"

Stewart Hicks is Associate Professor of Architecture and Associate Dean of the College of Architecture, Design, and the Arts, at the University of Illinois at Chicago, and founding partner of Design With Company. Stewart holds a Bachelor of Science in Architecture from the University of Michigan and a Masters Degree in Architecture from Princeton. He has taught at the University of Michigan and the University of Illinois Urbana-Champaign and held the Hyde Chair of Excellence at the University of Nebraska and masterclass teaching fellowship at Lawrence Technological University. Hicks' work has earned him the Architectural Record Design Vanguard Award and the Young Architects Forum Award. His work has been featured in exhibitions such as the Chicago Architecture Biennial and Design Miami, as well as at the V&A and Tate Modern in London. He co-authored the book *Misguided Tactics for Propriety Calibration* (Graham Foundation, 2015), as well as essays in *MONU* magazine, the AIA journal *Manifest*, *Log, bracket,* and the guest-edited issue of *MAS Contex*t on the topic of character in architecture. Finally, Hicks is the administrator of the Architecture With Stewart YouTube Channel, with over 250,000 followers. Dealing with architecture and the built environment through a brief and synthetic format, his videos aim to reach the general public as well as a professional audience.

6 — November 10 "Joseph Clarke: Designing of The Mid-Century Office Space"

Joseph Clarke is Associate Professor at the Department of Art History, University of Toronto Faculty of Arts & Sciences. Clarke holds a Masters Degree in Architecture from the University of Cincinnati and a PhD from Yale University. In 2018, he was a Visiting Scholar at the Max Planck Institute for the History of Science in Berlin. That same year he became the recipient of the SSHRC Insight Grant. Similarly, in 2020 he was awarded the Learning & Education Advancement Fund Grant at The University of Toronto alongside Christy Anderson. Finally, in 2021, Clarke became a Research Fellow at the Canadian Centre for Architecture in Montréal.

7 — December 1 "Paola Aguirre: A Borderless Practice"

Paola Aguirre is the founder of Borderless Studio, an urban design and research practice based in Chicago. She is also founder of Borderless Workshop, a research and collaborative platform focused on rethinking cities among the US-Mexico border region. On that front, she is the creator-producer of Mapeo Workshops that work with multiple universities and students from different programs to research, critically discuss and creatively think about urban challenges using mapping as a main tool. Mapeo works with students, instructors, community members, and guest experts to create conversations, and exchange knowledge and ideas through an intense boot-camp format. Paola actively participates with academic institutions, and has been guest reviewer to design studios at University of Michigan (Ann Arbor), Illinois Institute of Technology, Archeworks (Chicago), University of Texas (Austin), Arizona State University (Tempe), University of Tennessee (Knoxville), and Instituto Tecnológico de Monterrey (Querétaro, Monterrey and Chihuahua). Paola currently teaches at The School of the Art Institute of Chicago and has taught at Washington University in St. Louis and Archeworks. Finally, she has been acknowledged by Next City Vanguard's 40 Under 40 (2016), Impact Design Hub's 40 Under 40 (2017), and Newcity Design 50: Who Shapes Chicago (2018).

SPRING 2023

The Research Forum Podcast: Chicago's Day Off
This season of The Research Forum podcast, Chicago's Day Off, takes inspiration from the adventures of Ferris Bueller, protagonist of the 1986 John Hughes' masterpiece. As an homage to Chicago, *Ferris Bueller's Day Off* depicts a dynamic and ever-interesting urban landscape. As opposed to adopting a contemplative stance towards Chicago, Ferris becomes, even if for just one day, an active protagonist in the city's life. Like Ferris, our guests this season are active protagonists in Chicago's architecture, landscape architecture, and urban scenes. Yet, unlike Ferris's one-time-only kind of gig, our guests are a constantly active and enduring force in this city's life. This podcast shares the stories of Chicago's contemporary protagonists.
Curated and hosted by Alejandro Saldaña Perales, PhD Candidate

1 — January 26 "Zach Mortice"
Architecture Journalist for *Architectural Record, Architect's Newspaper, Places Journal, and the New York Review of Architecture.*

2 — February 9 "Dr. Michelangelo Sabatino"
Architecture Historian, Professor, and PhD Program Director at the College of Architecture, Illinois Institute of Technology.

3 — February 23 "Elizabeth Blasius"
Architecture Historian featured in *Curbed Chicago, The Chicago Tribune, The Daily Line, and MAS Context*.

4 — March 9 "Thomas 'Gunny' Harboe"
Architect (Preservation, Restoration, Rehabilitation or Adaptive Reuse) and founder of Harboe Architects, PC.

5 — March 23 "Jack Crawford"
UX Architect at FCB Chicago, commercial real estate journalist for Chicago YIMBY, and co-founder of Rebar Radar, an urban data + visualization SaaS company.

6 — March 30 "Dr. Ryan Roark"
Architect, Writer, and Assistant Professor, College of Architecture at Illinois Institute of Technology.

7 — April 13 "Geoffrey Baer"
2021–2022 Emmy award-winning Executive Producer at WTTW, TV Host, and Chicago Journalist.

8 — May 4 "Maura Fennely"
PhD Candidate at Northwestern University, Weinberg College of Arts & Sciences, Department of Sociology.

PhD Candidate Mina Geng elaborates on the conclusions identified through her research during her thesis dissertation defense, October 11, 2022.

Alejandro Saldaña Perales (left) and Shermann “Dilla” Thomas (right) during the recording of their conversation for The Research Forum podcast, October 20, 2022.

Alejandro Saldaña Perales (left) and Adam Paul Susanek (right) in S. R. Crown Hall during the Q&A session shortly after the end of their conversation for The Research Forum podcast, October 6, 2022.

HOUSING BLOCS SYMPOSIUM HIGHLIGHTS

About Housing Blocs

The project began as an interdisciplinary approach to comparative study of mass housing projects, their ordinary lives, and their disposition (including threats to conservation) across the United States of America and the former socialist republic of Yugoslavia. The project's scope has grown to investigate additional linkages to socialist and post-socialist nations in Europe and the Americas. Despite the Cold War divide in political economies across these nations, both simultaneously contributed to the largest production of modernist architecture in history, the global construction of mass housing. These projects are beginning to be reappraised as architecture, as housing, and as a social setting, but research gaps remain. Little research has explored the relationship between the capitalist U.S. and the socialist states of Europe, beyond misleading characterization of mass housing as an inherently problematic instance of aesthetic modernism. This project aims to expand and correct the record.

Housing Blocs: Ordinary Modernism Across the Atlantic

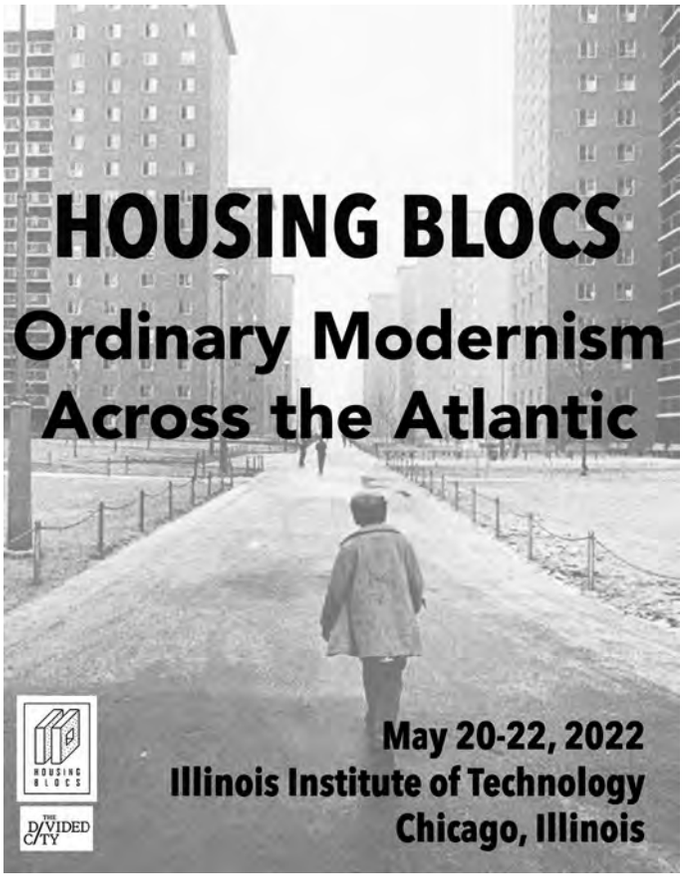
S. R. Crown Hall
Illinois Institute of Technology
Chicago, Illinois, USA

May 20–22, 2022

Recent scholarship on architectural modernism has deepened critical attention to social structures and political economies, while also widening research to include "ordinary" architecture including mass housing. Extensive publication around mass housing in Europe has engaged post-socialist issues in perception, valuation, and conservation of mass housing, while similar output concerning the mass housing legacy of the United States has strongly focused on race and social othering as well as erasure of high-rise forms. While some surveys of global mass housing exist, there are few concentrated comparative projects that place the mass housing of the United States into dialogue with European programs, beyond repeated narratives of aesthetic influence. Also in the current moment of a global pandemic, internationalism seems crucial as we create narratives of the past, present, and future.

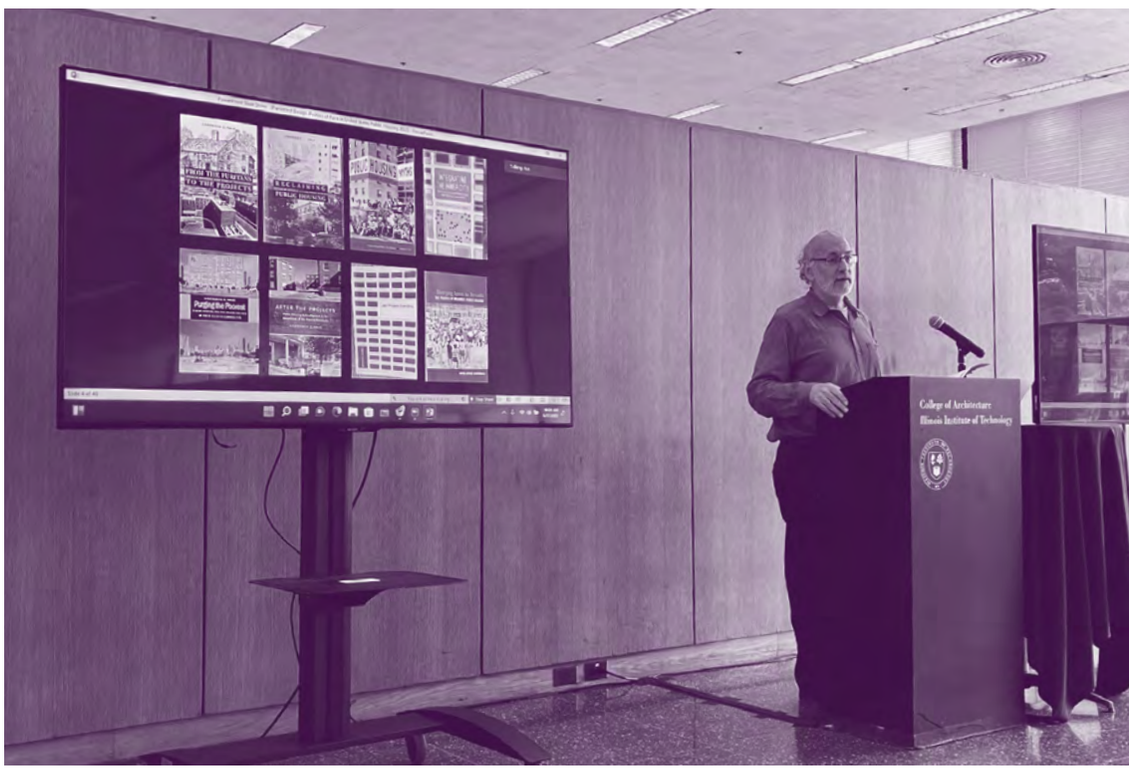
The Housing Blocs symposium calls for research that revisits the scene of the Iron Curtain through the specific material practices of mass housing production, maintenance, and disposition. The symposium builds from a workshop in October 2021 in Belgrade that positioned inquiry around the mass housing architectures of the United States and Yugoslavia, with specific focus on how contemporary political and social valuation has impacted both conservation of sites and historical scholarship. As the United States and Yugoslavia pursued mass housing production programs after World War II simultaneously, they also opened diplomatic relations that makes the relationship distinct from that between the U.S. and the post-socialist nations within the Soviet Union and its sphere of influence. Mass housing production in both nations also form an interesting set of divergences, while today gentrification has impacted the survival of mass housing in both the U.S. and post-Yugoslavian republics.

The symposium is interdisciplinary and invites proposals from architectural history, heritage/historic preservation, political science, cultural studies, urban studies, sociology, anthropology, race and gender studies, literature, art, film, and other fields.



Poster for Symposium “Housing Blocs: Ordinary Modernism Across the Atlantic,” May 20-22, 2022.

Keynote Lecture in S.R. Crown Hall by Lawrence J. Vale, Massachusetts Institute of Technology, “The Persistent Design-Politics of Race in United States Public Housing,” May 21, 2022.



ANNUAL SYMPOSIUM HIGHLIGHTS

Overview

6th International Graduate Student Symposium

Regenerative Cities: Infrastructure, Landscape, Buildings, and Technologies

November 18–19, 2022

The annual International Graduate Student Symposium (IGSS) is the preceding event to this very publication. In this 6th edition, we returned to the monumental S. R. Crown Hall, home of the College of Architecture, after a hiatus through the worst of the pandemic which saw this Symposium pushed back. Large numbers of students, faculty, and guests marked the much anticipated comeback of this Symposium. This sixth edition of the IGSS was special. Just a few days earlier, the United Nations Environment Programme issued an alarming report. The target of keeping rising temperatures on our planet to just 1.5º C, established in Paris just 7 years ago and agreed upon by most nations in our world, was determined to be out of reach. In parallel, just three days before the start of this Symposium, our planet was now officially home to 8 billion people.

The challenge to ensure we all enjoy better living conditions has never been greater. However, saving our planet from a gruesome fate is far from impossible. How will the disciplines of architecture, landscape architecture, and urbanism address the challenge of providing better living conditions to all humankind? Enter Regenerative Cities. This concept favors cities as the birthplace of the most innovative strategies towards better living conditions. For cities, the term regenerative suggests the development of resilient systems capable of facing waves of climate-related challenges. Similarly, not confined merely to an ecological term, regenerative expands its discourse towards the social challenges already in place over most major cities. These challenges demand equally powerful strategies capable of adapting social systems to meet indeterminate scenarios.

PhD Symposium poster greeting guests, faculty, and students at S. R. Crown Hall south entrance. PhD Symposium storefront wall welcomes everyone to the lecture hall at S. R. Crown Hall's lower level.

In designing Regenerative Cities, architecture, landscape architecture, and urbanism must strategically perform through a spectrum of urban scales and collaborate with a wide array of disciplines. From the macroscale of urban landscapes and infrastructure, onto the mesoscale of policies and streetscapes, and into the microscale of building technologies and their performance, the Regenerative Cities Symposium assessed the contemporary built environment at the threshold of a challenging and uncertain urban future.

Over the course of two days, attendees were joined by a unique selection of experts, scholars, and aspiring scholars. This collection of architectural research addressed the challenges that climate crisis and rapid urbanization put forward over the contemporary urban landscape. Always optimistic, this Symposium explored the many efforts currently shaping the blueprints of Regenerative Cities.

From left: Dr. Amjad Alkoud, Alejandro Saldaña Perales, Dr. Peng Du, Dr. Michelangelo Sabatino, Dr. Piyush Khairnar, and Alexis Arias Betancourt pose for a picture shortly before the beginning of the Symposium.

Alejandro Saldaña Perales

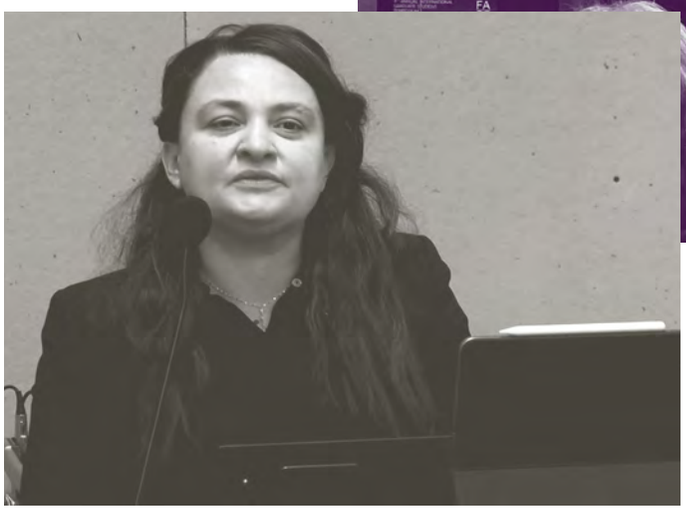
Above: Ron Henderson and Dr. Michelangelo Sabatino are seen offering the PhD Symposium's closing remarks at a ceremony hosted at the Tadao Ando-designed Wrightwood659 exhibition space.

Right: Dean Reed Kroloff offers an encouraging speech to all attendees regarding the importance and value of research in architecture.

Alejandro Saldaña Perales welcomes all panelists at the front of the PhD Symposium lecture hall on the lower level of S. R. Crown Hall.

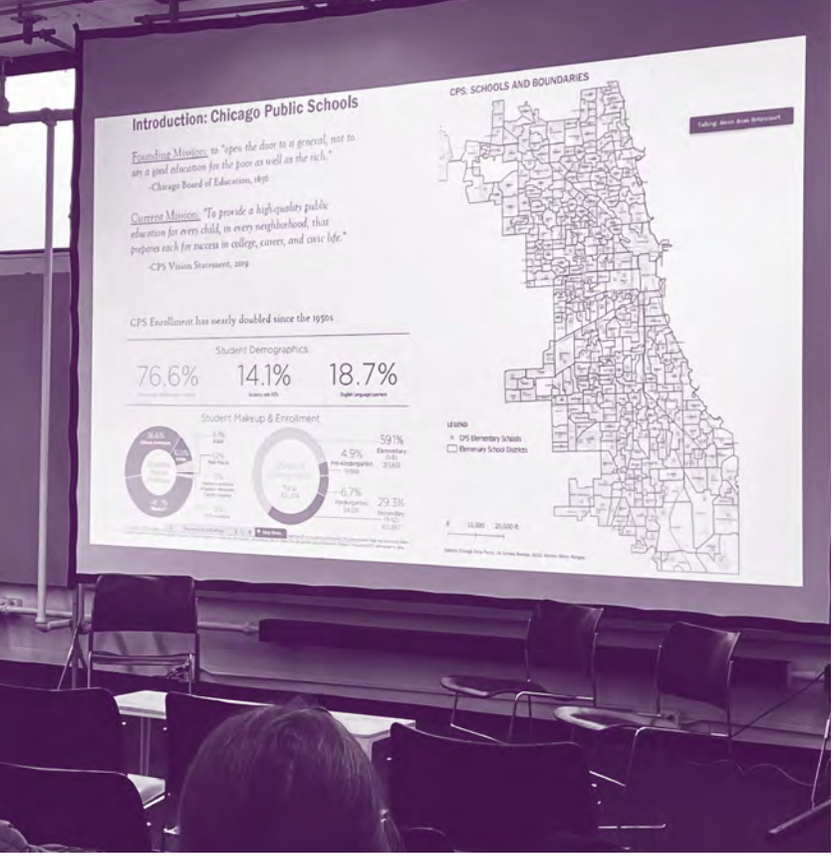
Commissioner Maurice D. Cox delivers a passionate and informative presentation to the Symposium attendees regarding his approach to the Regenerative Cities concept by doing a rundown of the achievements and milestones of his work in Charlottesville, Detroit, and Chicago.

Henry Heligas, Master of Science in Architecture students and PhD Symposium participant, presents his research.



Dr. María Villalobos Hernández, Assistant Professor at the CoA, shares with the audience her latest research and her contributions to the future Englewood trail project.

Commissioner Maurice D. Cox delivers a passionate and informative presentation to the Symposium attendees regarding his approach to the Regenerative Cities concept by doing a rundown of the achievements and milestones of his work in Charlottesville, Detroit, and Chicago.

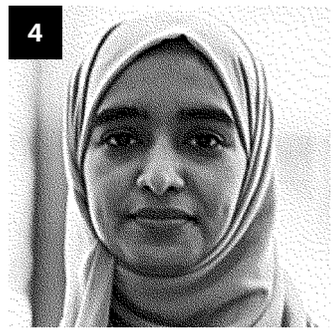


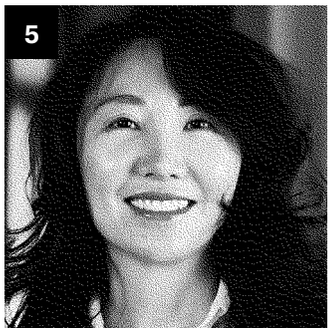
Dr. Piyush Khairnar shares synthetic remarks regarding the microscale of building technologies and their performance framework at the Symposium.

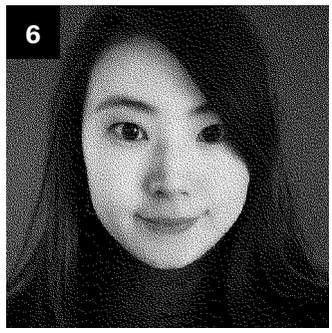
STUDENT LIFE AND RESEARCH

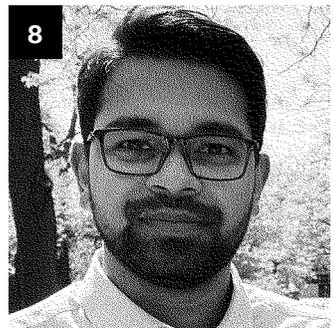
Overview of Doctoral Research

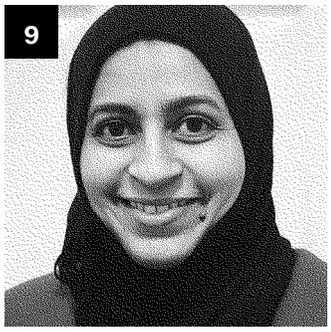
The PhD students and candidates at IIT come from diverse backgrounds. Together, they compile decades of professional and academic experiences which shape their research. Both as colleagues and friends, students are encouraged to spend leisure time in activities that help build strong ties with their peers as well as to contribute to their studies. Taking advantage of our privileged location, we love to take the initiative and explore. Chicago, a major global city and epicenter of architecture in North America, waits for us to wander through its streets, mingle in its neighborhoods, and linger at its parks. The city inspires us to address the contemporary dilemmas of urban environments and city life. Here, such inspiration and the students' experiences can lead them to specialize in the architectural and cultural, as well as the socio-technical dimensions, of the discipline of architecture. The research done by our students fits well within the History, Theory, and Criticism (HTC) and the Technologies of the Built Environment (TBE) tracks. These provide our students with opportunities to work alongside highly experienced and trained faculty to better shape their work. Similarly, working close with peers has profound impressions on one's research, equally as powerful as the teachings brought forward by our faculty. Shaping an environment which fosters, encourages, and facilitates such interactions is of great importance to us. Our students spend plenty of time together as they become part of each other's daily routines. They form a tight and supportive community.

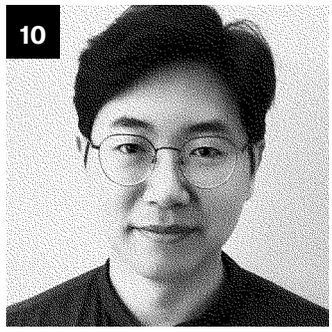


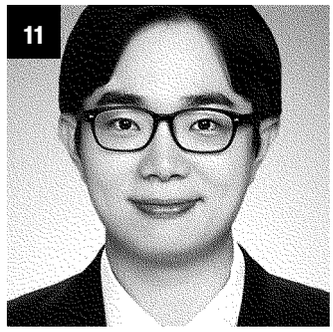


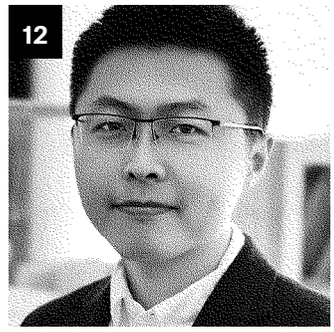


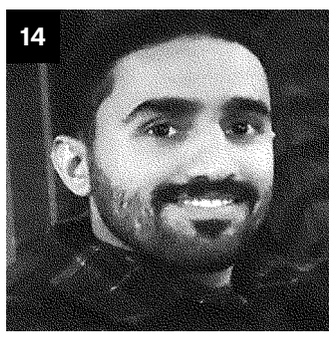












1 — Amjad Alkoud
Ultra-Tall Building Ordinances: Investigating the Impact of Ultra-Tall Building Ordinances on the Future of Major Cities (2015–2022)

2 — Alexis Arias Betancourt
Re-Designing The Driverless City: The Social, Environmental, and Experiential Possibilities of Autonomous Vehicles (2020–)

3 — Ahmed Abdullah Obaid Ba Tis
The Architecture of Reconstruction: Reconstruction Strategies in War Torn Yemen (2022–)

4 — Aamena Bakarmom
The Efficient Strategy of Passive Cooling Design to Maintain Indoor Thermal Comfort: A Case Study in Hot-Dry Climate (2022–)

5 — Camelia Geng
The Feasibility of Honeycomb Structures to Enhance Daylighting and Energy Performance for High-Rise Buildings (2020–2022)

6 — Liwen Kang
The Impacts of the Built Environment on Health: General, Physical, and Mental Well-Being Benefits of Urban Green Spaces (UGS) (2018–2023)

7 — Çiçek Karatas
Adaptive Reuse Strategies: Converting Underused Office Buildings to Affordable Housing in Chicago's Financial District (2022–)

8 — Piyush Khairnar
Applications of Carbon Composites: A Study in Structural Applications of Carbon Fiber Composites in Tall Buildings (2018–2022)

9 — Zahida Khan
Human Behaviour & Microclimates: An ABM Approach to Integrate Outdoor Thermal Comfort and Human Spatial (2018–2022)

10 — Yohan Kim
Double-Skin Facades: The Feasibility of Double-Skin Facades to Provide Natural Ventilation in Tall Office Buildings (2017–2022)

11 — Donghyun Lee
Optimization of Natural Light by Kinetic Active Shading Devices in Office Workspace: A New Approach Towards Indoor Daylight Control and Energy Efficiency in the Active Shade Designs of Office Workspace (2020–)

12 — Lijian Ma
Embodied Energy and Environmental Impacts: A BIM-Based Life Cycle Assessment Tool of Embodied Energy and Environmental Impacts of Reinforced Concrete Tall Buildings (2018–2022)

13 — Lobna Mitkees
Thermal Comfort in S. R. Crown Hall: An Incremental Design Approach for Culture Preservation and Energy Conservation of Historic Buildings Using Personal Comfort Systems (2018–2023, posthumous)

14 — Abdulmalik Saleh
Design with Nature: An Ecological Study Along the Coast of Aseer Region, Saudi Arabia (2023–)

15 — Alejandro Saldaña Perales
Parks Take Command: Public Space Centered Design Frameworks for Large-Scale Private Developments in Chicago (2019–)

16 — Sasha Zanko
Resort Architecture: Coastal Yugoslavian Holiday and Recreational Facilities in Present-Day Croatia (2022–)

17 — Jati Zunaibi
How Function Follows Food: An Ecological Civic Structure (Library) Facilitating Food Behavior Through Air Handling Aromatic (within Bronzeville, Chicago) (Leave of absence)

STUDENT LIFE AND RESEARCH

Our PhD Community

The pandemic-oriented policies aimed at mitigating the spread of COVID-19 have eased up. COVID-19 is slowly but steadily less a dangerous disease and more of a present-day inconvenience. Opportunities to go out and mingle amongst friends, family, and colleagues have increased as time goes by. From scheduled visits to more informal gatherings, the members of the PhD Community at the College of Architecture have been enjoying, with reinvigorating spirit, the opportunity to get together. Whether scholarly programs, leisurely activities, or adventurous exploration of Chicago's urban landscape, the PhD Community hardly misses these chances to gather and meet in person.

Photos courtesy of Alejandro Saldaña Perales.

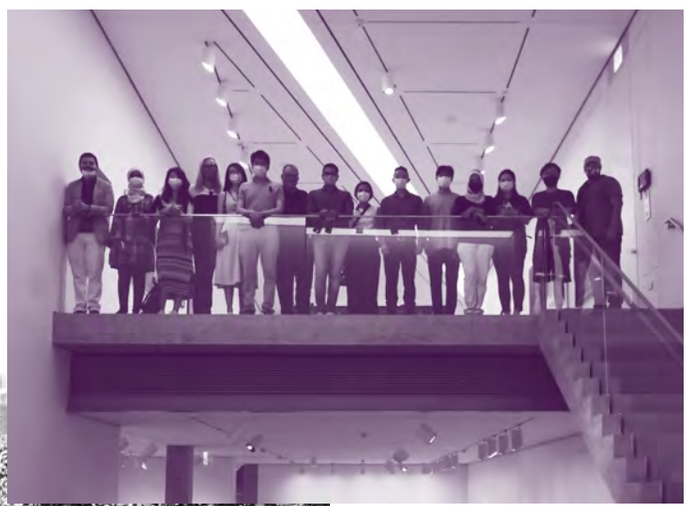
Wrightwood659
September 9, 2021
Panel Discussion: Yannis Tsarouchis and His Contemporaries: Body, Building, and Landscape

Wrightwood659
September 24, 2021
Exhibition Opening — Romanticism to Ruin: Two Lost Works of Sullivan and Wright

Graceland Cemetery Tour
September 19, 2021
Led by Kevin Harrington, Professor Emeritus of the Lewis College of Science and Letters
Illinois Institute of Technology

Smart Museum of Art at the University of Chicago
October 16, 2021
Field Trip — Towards Common Cause: Art, Social Change, and the MacArthur Fellows Program at 40

Attendees pose for a picture inside the museum. Standing from left to right: Jati Zunaibi, Dr. Daniel Whittaker, Alejandro Saldaña Perales, Piyush Khairnar, and Austin Heerema. Seated from left to right: María Villarreal and Lobna Mitkees.



PhD students pose at Wrightwood659 Gallery with Prof. Sabatino (first from left) and Prof. Henderson (seventh from left) during the panel discussion: Yannis Tsarouchis and His Contemporaries: Body, Building, and Landscape.

Attendees at the Graceland Cemetery Tour.

MCHAP Book Launch
March 23, 2022
Conversation with editors, designers, jury members, and winners of the 2nd MCHAP Cycle. Lower Core of S. R. Crown Hall.

Above: Participants gather for some refreshments during the MCHAP 2022 Exhibition at S. R. Crown Hall's center core.

Left: Panelists join in conversation and discuss the MCHAP program. At the table, from left to right: Vedran Mimica, Florencia Rodriguez, Stan Allen, Wiel Arets, Sandra Barclay, and Dirk Denison.

Mies van der Rohe Birthday Celebration: Steppin' Up!
March 24, 2022
Organized by The Mies van der Rohe Society, in collaboration with Dr. Cynthia Vranas Olsen, the College of Architecture, and Dirk Lohan.

Attendees join in for a speech and a toast in honor of the founder of the CoA, Mies van der Rohe, at S. R. Crown Hall's north core.

Pullman: A Chicago Neighborhood Tour
September 17, 2022
Organized in collaboration with the Pullman National Historical Park.

Liwen Kang and her family are joined by Alejandro Saldaña Perales to pose for a picture outside of the Pullman National Historical Park.

Oak Park, IL, Tour: From Miscellaneous to Wright
October 8, 2022
Led by Alejandro Saldaña Perales, PhD Candidate
Illinois Institute of Technology

Attendees pose for a picture just outside of The Frank Lloyd Wright Home and Studio.

Evanston, IL, Tour: The Architecture and Landscapes of the Northwestern University Campus
October 29, 2022
Led by Alejandro Saldaña Perales, PhD Candidate
Illinois Institute of Technology

Picture from the corner of Chicago Ave. and Sheridan Road–The Arch–looking northeast towards University Hall.

Tour of 860–880 Lake Shore Drive
April 9, 2023
Led by Dr. Michelangelo Sabatino, Director of PhD program in Architecture
Illinois Institute of Technology

Professor Sabatino leads a tour of 860-880 Lake Shore Dr. with Princeton architectural students, Dirk Lohan and Professor Jean-Louis Cohen. *Photo courtesy of Michelangelo Sabatino.*

Chicago: Mountains in the Prairies. Tour of Chicago's Loop
October 25, 2022.
Tour led by Dr. Michelangelo Sabatino, Director of Ph.D. program in Architecture
Illinois Institute of Technology.

Professor Sabatino gives a tour of Chicago's Loop for *GSD Option Studio, Chicago: Mountains in the Prairies* (Profs Floridi and Lunati), *onsitestudio*.

PhD Community: Daily & Miscellaneous Activities
Fall 2021–Spring 2023

Lobna Mitkees opens up a gift during the PhD Holiday Party at the PhD Studio, December 2, 2021.

Dr. Piyush Khairnar and Dr. Zahida Khan pose for a picture with a group of their students, May 2022.

Çiçek Karatas, Sasha Zanko, and Ahmed Abdullah Obaid Ba Tis during a video conference with Coby Lefkowitz in New York City, September 8, 2022.

PhD community members gather around Adam Paul Susanek at the local neighborhood pizzeria, October 6, 2022.

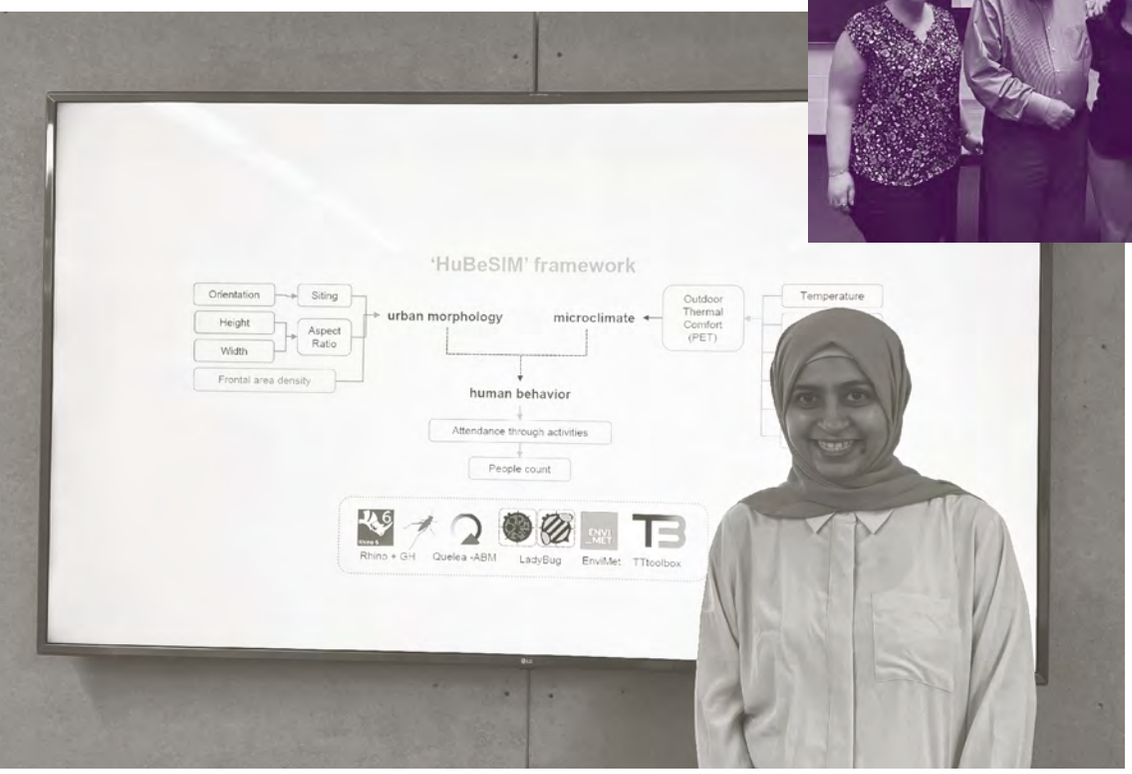
Alejandro Saldaña Perales and TikTok superstar Shermann “Dilla” Thomas enjoy an evening at S. R. Crown Hall eating tacos and churros, October 20, 2022.

Çiçek Karatas takes a selfie with attendees at the recording of the 5th episode of The Research Forum podcast featuring YouTube star Stewart Hicks, October 28, 2022.

PhD student Aamena Bakarmom in conversation with John Vinci (SAH Celebrates, Arts Club of Chicago, November 10, 2022). *Photo courtesy of Michelangelo Sabatino.*

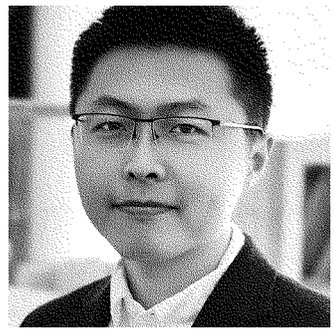
Members of the PhD Community during a casual conversation before the Holiday Party, December 19, 2022.

PHD DEFENDED DISSERTATION ABSTRACTS



PhD Candidates during and after defending their dissertations successfully. Above: Liwen Kang with her doctoral committee. Left: Zahida Khan explaining HuBeSim, an outcome of her research. Below: Amjad Alkoud during his final defense.

A BIM–BASED LIFE CYCLE ASSESSMENT TOOL OF EMBODIED ENERGY AND ENVIRONMENTAL IMPACTS OF REINFORCED CONCRETE TALL BUILDINGS



Lijian Ma

Thesis Defense (3410 S. State St.
Room 103 and Virtual)
April 12, 2022

Abstract

Today, 55 percent of the population in the world lives in urban areas which is expected to increase to 68 percent by 2050. In the cities, high-rise buildings as symbols of the modern cityscape are dominating the skylines, but the data to demonstrate their embodied energy and environmental impacts are scarce compared to low- or mid-rise buildings. Reducing the embodied energy and environmental impacts of buildings is critical as about 42 percent of primary energy use and 39 percent of global greenhouse gas (GHG) emissions come from the building sector. However, it is an overlooked area in embodied energy and environmental impacts of tall buildings. This doctoral research aims to investigate the effects of tall buildings on embodied energy and environmental impacts by using process-based life cycle assessment (LCA) methodology within the Building Information Modelling (BIM) environment, which provides a construction industry platform to incorporate sustainability information in architectural design.

This doctoral research is carried out through a literature review on embodied energy of high-rise buildings. Current LCA methods of buildings are also discussed in the literature review. It then develops a framework for BIM-based assessment of the embodied energy and environmental impacts of tall buildings. To achieve that, a case study of tall reinforced concrete buildings is applied, by using ISO 14040 and 14044 guidelines with available database, Revit, and Tally application in Revit. The author concentrates on embodied energy and environmental impacts of reinforced concrete tall buildings. Finally, the association between design and construction variables with embodied energy and environmental impacts is explored.

EFFICIENCY OF CARBON FIBER COMPOSITE STRUCTURAL SYSTEMS FOR TALL BUILDINGS: A PARAMETRIC SIMULATION BASED FRAMEWORK FOR FINITE ELEMENT ANALYSIS

Piyush Khairnar

Thesis Defense (S. R. Crown Hall and Virtual)
April 12, 2022

Abstract

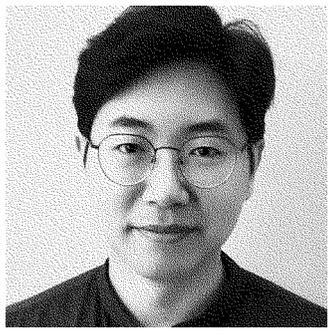
The rate of global urban migration has increased drastically over the last century. With increasing population, the need for dense urban habitats is growing. Tall buildings are at the forefront of this growth and the changing skyline of different cities around the globe is evident. The structural system is an important and critical component of any tall building. Structural material can significantly impact the performance of a structural system as well as the way it is constructed. Carbon composite is known for its high strength and stiffness, also it is a lightweight structural material. Current industrial techniques allow for manufacturing of structural components made of carbon composite to be used in building structures. Carbon composite as a structural material shows potential to be used in tall buildings where strength and stiffness requirements are a key parameter.

This research focuses on applications of Carbon Composite, also known as Carbon Fiber Reinforced Polymer (CFRP), as a structural material for tall buildings. The research aims to study the properties of carbon composite as a structural material and to explore its application in the structural system for tall buildings. Mechanical properties of CFRP, such as strength, stiffness, etc., are studied with available literature to assess the potential of the material to be used in the design of structural systems for tall buildings. Manufacturing processes along with fabrication methods are also studied to investigate the constructability using CFRP.

The research draws attention to the issues of connectivity within CFRP structural components as well as performance of CFRP as a structural material in tall building structural systems. Computer-based simulations are utilized to develop digital models and analyze the performance of the material in structural systems of tall buildings. Current applications of the material in the building and construction sector are addressed in the literature review. This research evaluates the performance of the structural systems for tall buildings using Carbon Composite as the primary structural material. Connection level simulations presented in this research provide insights on the significance of fiber orientation in the fabrication of structures. Other challenges in the widespread use of CFRP material in tall buildings are addressed in the research but focus of the research is on the structural applications of the material in tall buildings.

The research provides information about the use of CFRP as a structural material in tall buildings. The results of this study offer significant insights about the issues of connectivity and constructability related to use of CFRP in tall buildings. This research also provides a parametric framework for architects and designers to evaluate and study the performance of structural materials to be used in tall building structural systems using finite element analysis.

THE FEASIBILITY OF DOUBLE-SKIN FACADES TO PROVIDE NATURAL VENTILATION IN TALL OFFICE BUILDINGS



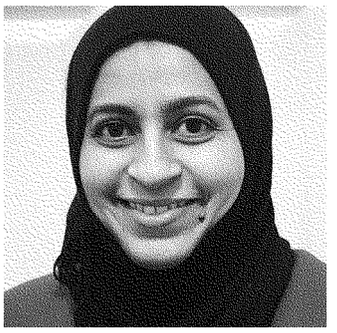
Yohan Kim

Thesis Defense (S. R. Crown Hall and Virtual)
April 13, 2022

Abstract

Many tall office buildings (i.e., buildings of or taller than 656 ft [200 m]) are on the rise around the world. The energy efficiency and healthy environment of tall office buildings has become an important concern, given the current environmental challenges and health considerations. Natural ventilation has proven to be an effective passive strategy in improving energy efficiency and providing healthy environments given environmental challenges. However, such a strategy has not been commonly adopted in tall office buildings that traditionally rely on single-skin facades (SSFs), due to the high wind pressure that creates excessive air velocities and occupant discomfort at upper floors. Double-skin facades (DSFs) can provide an opportunity to facilitate natural ventilation in tall office buildings, as the fundamental components such as the additional skin and openings create a buffer to regulate the direct impact of wind pressure and the airflow around the buildings. This study investigates the impact of modified multi-story type DSFs on indoor airflow in a 60-story, 780-foot (238 m) naturally ventilated tall office building under isothermal conditions. Therefore, the performance of wind effect-related components was assessed based on the criteria (e.g., air velocity and airflow distribution), with respect to opening size, number of openings per floor, cavity depth, and cavity segmentation. Computational fluid dynamics (CFD) software was utilized to simulate outdoor airflow around the tall office building, and indoor airflow at various heights in case of various DSF configurations. Further insight on indoor airflow behaviors depending on various DSF configurations leads to a better understanding of the DSF design strategies for effective natural ventilation in tall office buildings. This study aims to develop a performance-based DSF design guideline to assist architects in their design of DSF components in the early design stage.

HUMAN BEHAVIOUR & MICROCLIMATES: AN ABM APPROACH TO INTEGRATE OUTDOOR THERMAL COMFORT AND HUMAN SPATIAL



Zahida Khan

Thesis Defense (3410 S. State St. Room 112 and Virtual)
July 13, 2022

Abstract

Human behavior is a key indicator for successful outdoor public spaces in cities despite the challenges in its prediction. A good public space engages human-built environment interaction to cultivate livable communities and sustainable cities. With ample research available on human behavior in public spaces, there is a recent shift in research to develop tools that integrate these findings and help architects and planners assess their designs before execution. Additionally, tall urban conditions are ubiquitous due to constant population increase and urbanization. Tall buildings create unique microclimates in outdoor public spaces. Poor thermal comfort levels due to unpleasant microclimates affect peoples' attendance rate in public spaces. Hence, it becomes important to integrate environmental conditions into people flow studies. The key objective of this doctoral research is to develop a human spatial behavior simulation framework for urban plazas in cities with hot summer humid continental climate. This research attempts to (1) understand the interrelations between outdoor thermal comfort, human behavior, and urban morphology, and (2) develop an agent-based model to predict human spatial behavior that assimilates social and environmental factors.

THE FEASIBILITY OF HONEYCOMB STRUCTURE TO ENHANCE DAYLIGHTING AND ENERGY PERFORMANCE FOR HIGH-RISE BUILDINGS

Camelia Geng

Thesis Defense (3410 S. State St. Room 112 and Virtual)
October 11, 2022

Abstract

Daylighting is the most important element in the existence of living things and it also provides the energy for the human body. Even though direct sunlight can result in glare issues, some methods of filtration of lighting, diffusing glare can alleviate such issues to make living space comfortable. Filtration of daylighting is technically a removal or blocking of UV rays before penetration of a given surface. Biomorphic facade such as honeycomb architecture is a structural method to renovate the facade to target energy efficiency and daylighting performance. It can be more interesting and aesthetically intriguing and provide a new living pattern. Especially in terms of daylighting and energy, which are versatile assets in the design process, as it can be innovated a variety of lighting conditions through the biomorphic conception. The biomorphic honeycomb facade design includes nature orientation, nature material insulation, open view for daylighting, and designing a building to take advantage of natural ventilation opportunities. In general, the biomorphic facade for high-rise buildings is using natural structure to solve passive design strategy, and makes people feel the existence of this strategy clearly. Ecological Urbanism sees architecture and infrastructure as a continuation of the natural landscape or an uplift of the earth's surface. An ecological high-rise building is not only a green or vegetation space, but also a continuous surface structure, a kind of thickened ground. As a kind of urban support structure, it can accommodate ecological infrastructure dominated by various natural processes and public infrastructure dominated by multiple functions and provide them with public support and services.

INVESTIGATING THE IMPACT OF ULTRA-TALL BUILDING ORDINANCES ON THE FUTURE OF MAJOR CITIES: CHICAGO & DUBAI

Amjad Alkoud

Thesis Defense (S. R. Crown Hall and Virtual)
November 9, 2022

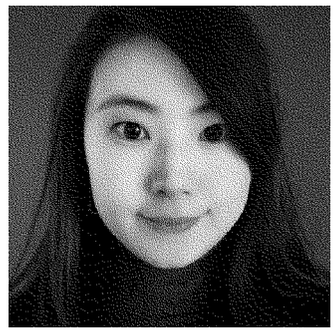
Abstract

Soft infrastructure, ordinances, municipal laws, codes, and policies are key instruments that shape our cities; control demography, forms, spaces, and skylines; and determine qualities of life, well-being, health, and comfort. Tall Building Ordinances (TBOs), in turn, control the development of tall buildings, as distinctive actors in the built environment of major cities today, and influence the urban identities, structure, and characters.

The key aim of this doctoral study is to investigate the interactions between TBOs and the development of ultra-tall buildings, to better understand the role and dynamics of different municipal policies within the urban morphology, and how ordinances could be improved to shape a sustainable future of our cities. The study seeks answer(s) to the following question: How can cities regulate ultra-tall buildings, as a well-defined catalyst, in anticipation of future challenges and uncertainty?

This doctoral dissertation aims to develop an approach to establish universal criteria for evaluating the existing set of TBOs in different cities and to help policy-makers improve the regulatory framework/guidelines for ultra-tall constructions to implement a more indigenous, flexible, and responsive approach towards the emerging human needs and technologies.

HEALTH AND WELL-BEING BENEFITS OF DIFFERENT TYPES OF URBAN GREEN SPACES (UGS): A CROSS-SECTIONAL STUDY OF COMMUNITIES IN CHICAGO, U.S.



Liwen Kang

Thesis Defense (S. R. Crown Hall and Virtual)
April 2023

Abstract

Urban green spaces (UGS) have been associated with better health and well-being. They provide sites for physical activity, buffer air and noise pollution, and alleviate thermal discomfort. UGS also promote social interaction and increase social cohesion. However, research is limited on the health benefits of different types of UGS provisions. This research aimed to reveal the associations between the availability of different UGS types and urban residents' general, mental, and physical health in Chicago, the third largest city in the U.S. There are three main interrelated areas of focus in this research related to UGS: the general well-being, mental, and physical health. In this research, these three areas were analyzed separately. The data of the three health aspects were collected from the Healthy Chicago Survey (HCS), an annual telephone survey that interviewed adults in Chicago, U.S., based on randomly selected addresses. UGS data were collected from the National Land Cover Database (NLCD), the Meter-Scale Urban Land Cover (MULC), and the Chicago Park District (CPD). Different aspects of UGS were obtained, namely the percent tree canopy cover (TCC), the percentage of trees, the percentage of grass, the number of parks, the park area, and the percentage of park area. Using hierarchical and logistic regression models that controlled for a range of confounding factors (age, gender, race, education level, employment status, and poverty level), this study assessed which type of UGS affect general, mental, and physical health, respectively. The results indicated that increased park area was significantly associated with better general health; higher percent tree canopy cover (TCC) was significantly associated with a lower level of psychological distress; and increased percentage of park area and increased number of parks were associated with lower odds of being obese. The study highlights that different UGS types have various impacts on general, mental, and physical health of urban residents. However, the negative association between the percentage of grass and obesity was found. Other qualitative characteristics of UGS are suggested to be taken into consideration for future studies. Adequate and equitable access to UGS in the city is very important for urban dwellers to receive benefits from UGS. In communities that reported relatively lower general health and physical health levels, access to parks can be enhanced and prioritized. In communities that had relatively lower mental health levels, increasing the percent tree canopy cover is preferred over other forms of UGS. By providing scientific evidence, this study can help policymakers, urban planners, and other related professionals to make informed decisions on maximizing the health benefits of UGS and to achieve social equity. The results also discovered the Healthy Chicago Survey (HCS) and the various UGS datasets (NLCD, MULC, and CPD) are useful and reliable sources for future studies. The findings of this study may be applied to other metropolitan cities.

ACCOMPLISHMENTS

Vinci Fellowship Tuition Scholarships

Congratulations to the recipients.

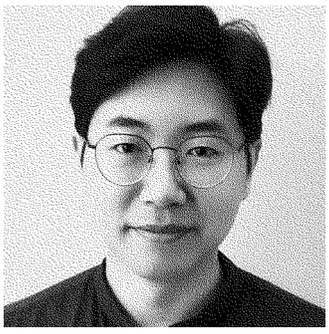
2021-22
Alexis Arias, Lijian Ma, Alejandro Saldaña Perales, and Jati Zunaibi

2022-23
Amjad Alkoud, Alexis Arias, Liwen Kang, Cicek Karatas, Zahida Khan, Lobna Mitkees, and Alejandro Saldaña Perales

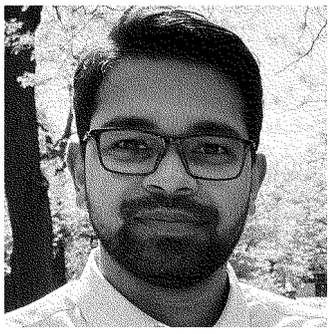
CoA—PhD Program End of Year Awards

Every year graduating students receive three awards: the ARCC King Student Medal, the Best Defended Dissertation Award, and the Spirit Award.

2021-22



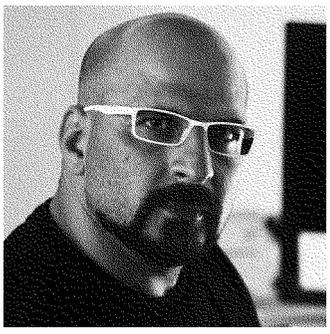
Kim, Yohan. *2021–2022 ARCC King Student Medal for Excellence in Architectural + Environmental Design Research*—Named in honor of the late Jonathan King, co-founder and first president of the Architectural Research Centers Consortium (ARCC), this award is given to one student per ARCC member college, school, institute, or unit. Selection of the recipients is at the discretion of the individual member institutions and is based upon criteria that acknowledges innovation, integrity, and scholarship in architectural and/or environmental design research. Kim's thesis is titled "The Feasibility of Double-Skin Facades to Provide Natural Ventilation in Tall Office Buildings." Thesis advisors and committee members: Dr. Mahjoub Elnimeiri (IIT CoA), Dr. Michelangelo Sabatino (IIT CoA), Prof. Tomas Brock (IIT CoA), Prof. Raymond Clark (IIT CoA), and Dr. Mohammad Heidarinejad (IIT Department of Civil, Architectural, and Environmental Engineering).



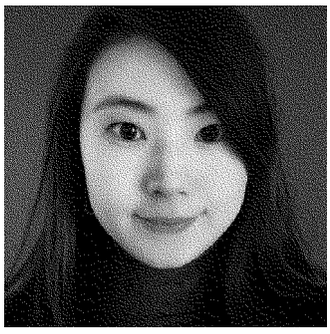
Khairnar, Piyush. *2021–2022 Best Defended Dissertation Award*—CoA PhD Faculty, Dr. Mahjoub Elnimeiri, Prof. Ron Henderson, Prof. Vedran Mimica, and Dr. Michelangelo Sabatino, convened to select the best defended dissertation in one of the two areas of specialized research: History, Theory, and Criticism or Technologies of the Built Environment. Khairnar's thesis is titled "Efficiency of Carbon Fiber Composite Structural Systems for Tall Buildings." Thesis advisors and committee members: Prof. Paul Endres (IIT CoA), Dr. Michelangelo Sabatino (IIT CoA), Prof. Tomas Brock (IIT CoA), and Dr. Matthew J. Gombeda (IIT Department of Civil, Architectural, and Environmental Engineering).

Saldaña Perales, Alejandro. *2021–2022 PhD Program Spirit Award*—Awarded to a graduating PhD student and selected by the PhD students and PhD Candidates in recognition of outstanding contributions to building community spirit.

2022-23



Alkoud, Amjad. *2022–2023 ARCC King Student Medal for Excellence in Architectural + Environmental Design 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 college, school, institute, or unit. Selection of the recipients is at the discretion of the individual member institutions and is based upon criteria that acknowledges innovation, integrity, and scholarship in architectural and/or environmental design research. Alkoud's thesis dissertation is titled "Investigating the Impact of Ultra-Tall Building Ordinances on the Future of Major Cities: Chicago & Dubai."



Kang, Liwen. *2022–2023 Best Defended Dissertation Award*—CoA PhD Faculty, Dr. Mahjoub Elnimeiri, Prof. Ron Henderson, Prof. Vedran Mimica, and Dr. Nadia Shah, convened to select the best defended dissertation in one of the two areas of specialized research: History, Theory, and Criticism or Technologies of the Built Environment. Kang's thesis dissertation is titled "Health and Wellbeing Benefits of Different Types of Urban Green Spaces (UGS): A Cross-Sectional Study of Communities in Chicago, U.S." Thesis committee: Chair, Dr. Michelangelo Sabatino (CoA); and Committee Members Prof. Ron Henderson (CoA), Dr. María Villalobos Hernández (CoA), Dr. Hao Huang (Lewis College of Sciences and Letters), and Dr. Nicole Ditchman ((Lewis College of Sciences and Letters).

Saldaña Perales, Alejandro. *2022–2023 PhD Program Spirit Award*—Awarded to a graduating PhD student and selected by the PhD students and PhD Candidates in recognition of outstanding contributions to building community spirit.

ACCOMPLISHMENTS

This is a summary of PhD student and PhD alumni accomplishments throughout the 2021–23 academic years:

Awards, Events, Fellowships, Grants, Scholarships, and Invitations

Abbasabadi, Narjes. Professor at the College of the Built Environment at the University of Washington in Seattle (2022).

Almahdy, Omar. Chairman of the City and Regional Planning Department, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia (2021).

Amado Petroli, Marcos. IIT College of Architecture PhD Program Best Defended Dissertation (2021).

Arias Betancourt, Alexis. Illinois-Indiana Sea Grant Graduate Student Scholars Sea Grant (2022).

Bay, Ezgi. Visiting Assistant Professor, University of Utah School of Architecture, Salt Lake City, UT (2021).

Bay, Ezgi. Assistant Professor at the Osmaniye Korkut Ata University, Osmaniye, Turkey (2022).

Du, Peng. Director of both the Masters of Urban Design (MUD) Future Cities Program and the Masters of Science in Geospatial Technology for Geodesign, College of Architecture & The Built Environment at Thomas Jefferson University, Philadelphia, PA (2021).

Du, Peng. Research session moderator, "Building Science & Technology: Sustainable Resilient Strategies." Association of Collegiate Schools of Architecture (ACSA) 110th Annual Conference (2022).

Du, Peng. 10 Years of Service Award by the Council on Tall Buildings and Urban Habitat (CTBUH) (2023).

Geng, Camelia; Lee, Donghyun; Li, Tian. 1st Place, The Solar Decathlon Design Challenge Retail Building (RT) Division, U.S. Department of Energy.

Li, Tian. PhD Student, Carnegie Mellon University School of Architecture, Pittsburgh, PA (2021).

Jeong, Hyesun. Urbanism: Relational Networks Research session, "The Future of Main Streets for Sustainable Placemaking in Downtown Arlington." Association of Collegiate Schools of Architecture (ACSA) 110th Annual Conference (2022).

Jeong, Hyesun. Assistant Professor of Urban Design & Co-Director of Simpson Center for Urban Futures, University of Cincinnati, OH (2022).

Khan, Zahida. PhD Program Spirit Award (2021).

Khan, Zahida. Assistant Professor at The R. Wayne Estopinal College of Architecture and Planning at Ball State University, Muncie, IN (2022).

Khairnar, Piyush. IIT College of Architecture PhD Program Best Defended Dissertation (2022).

Khairnar, Piyush. Adjunct Professor at IIT College of Architecture (2022–23).

Khairnar, Piyush. Instructor at Texas Tech University, Lubbock, TX (2022–23).

Kim, Yohan. The Architectural Research Centers Consortium (ARCC) King Student Medal (2022).

Kim, Yohan. Visiting Assistant Professor / Assistant Director of MTBVU program at IIT College of Architecture, and Academic Coordinator, Council on Tall Buildings and Urban Habitat (CTBUH), Chicago, IL (2022).

Saldaña Perales, Alejandro. DOCOMOMO U.S. National Symposium Scholarship (2021).

Saldaña Perales, Alejandro. Honor Award, "Orden, Unidad, Sistema: 15 años de la Cátedra Blanca. Instituto Tecnológico y de Estudios Superiores de Monterrey. ISBN: 978-607-501-591-0," 2021 Bienal de Arquitectura de Nuevo León (2021).

Saldaña Perales, Alejandro. PhD Program Spirit Award (2022).

Shah, Nadia. The Architectural Research Centers Consortium (ARCC) King Student Medal (2021).

Shah, Nadia. AmeriCorps VISTA Associate, Housing Capacity Builder at Community Partners for Affordable Housing (CPAH) (2022).

Zagow, Maged. Director of Architectural Design & Digital Architecture Program at Galala University, El Galala, Egypt (2022).

Zunaibi, Jati. Socially Responsible Modeling, Computation, and Design (SoReMo) Fellow, Public Administration/ Policy and Applied Math, (2021).

Zunaibi, Jati. Co-organizer DAP Collective: YOU ARE A(NTI)RACIST exhibition at The Glass Curtain Gallery, Columbia College, Chicago, IL (2022).

Publications

Abbasabadi, Narjes; Ashayeri, Mehdi. "A Framework for Integrated Energy and Exposure to Ambient Pollution (iEnEx) Assessment Toward Low-Carbon, Healthy, and Equitable Cities." *Sustainable Cities and Society Journal, Vol. 78,* March (2022).

Bay, Ezgi. Co-author "Assessment of Natural Ventilation Strategies in Historical Buildings in a Hot and Humid Climate Using Energy and CFD Simulations." *The Journal of Building Engineering* (2022).

Du, Peng. "We need to build up, but with intention and smart design." *GRID Magazine, Dec. 8, 2021,* Philadelphia, PA (2021).

Jeong, Hyesun. Reviewed by Nikita Amir "Walkability Won't Solve Neighborhood Health Inequities. Walkability is Only One Factor in Healthy Urban Infrastructure." *Popular Science*, February 28 (2022).

Jeong, Hyesun. "Creating Sustainable Cities Through Pedestrian Urbanism." (2023, anticipated).

Khan, Zahida; Azari, Rahman. "Outdoor Thermal Comfort and Human Interactions: Models and Methodologies." Book Chapter (2021, anticipated).

Whittaker, Daniel. "The Art of Construction: Wrightwood 659." *Ando and Le Corbusier: Volume 1: Tadao Ando, Chapter* (2021).

Presentations

Alkoud, Amjad. Guest lecturer at the College of Engineering of the Abu Dhabi University, The Skyscraper Architectural Design Course (Studio 5-Vertical Studio), invited by Professor Nadia Mounajjed, Abu Dhabi, UAE (2022).

Arias Betancourt, Alexis. "The Driverless City Project: Advancing Sustainable Mobility." Presented at the *E2S Climate Hub at University of Illinois at Chicago*, March 16 (2022).

Ashayeri, Mehdi. "Digital Media, Big Data, and Artificial Intelligence: Towards Inclusive Planning and Sustainability." *Graduate School of Public Administration (GSPA) at Seoul National University (SNU)*, October 20 (2022).

Fadel, Alia. "Biophilic Design Explained." Paper presentation at *Planted Cities, London* (2021).

Jeong, Hyesun. "Street Urbanism and Cultural Placemaking." Presentation at the *Spring PhD Architectural Research Forum; Urban Spectrum* (2021).

Kang, Liwen. Guest lecturer at the *SSCI 355 Regional Economic Development in the Social Science* by Prof. Hao Huang (2022).

Khairnar, Piyush. "Parametric Computation in Structure Design." *College of Architecture, IIT Chicago* (2023).

Khairnar, Piyush. "Parametric Computation Using Karamba3D." *College of Architecture, IIT Chicago* (2023).

Khairnar, Piyush. "Systems Thinking: Structural Systems." *College of Architecture, Ball State University,* September (2022).

Saldaña Perales, Alejandro; Villalobos Hernández, María. "Social Inclusion in Urbanism." *Pertanto + The New York Architecture Biennial (NYCAB),* April 27 (2022).

Villalobos Hernández, María; Zunaibi, Jati. "Social Justice in the Built Environment." *Justice Alliance for Design Education in Philadelphia (JADE-PHL) and Dark Matter University (DMU)*, (2021).

Whittaker, Daniel. "The PhD Dissertation Demystified." *Fall PhD Architectural Research Forum; Chicago Stories* (2021).

Whittaker, Daniel. "Yannis Tsarouchis: Dancing in Real Life." Guided tour and presentation at Wrightwood659 (2021).

Defended Dissertations

Seven students successfully defended their dissertations:

Ma, Lijian. "A BIM-Based Life Cycle Assessment Tool of Embodied Energy and Environmental Impacts of Reinforced Concrete Tall Buildings (2018–22)." PhD diss., Illinois Institute of Technology, April 2022. Committee: Mahjoub Elnimeiri (IIT CoA), Michelangelo Sabatino (IIT CoA), Tomas Brock (IIT CoA), and David Arditi (IIT Department of Civil, Architectural, and Environmental Engineering).

Khairnar, Piyush. "Efficiency of Carbon Fiber Composite Structural Systems for Tall Buildings. (2018–22)." PhD diss., Illinois Institute of Technology, April 2022. Committee: Paul Endres (IIT CoA), Michelangelo Sabatino (IIT CoA), Tomas Brock (IIT CoA), and Matthew J. Gombeda (IIT Department of Civil, Architectural, and Environmental Engineering).

Kim, Yohan. "The Feasibility of Double-Skin Facades to Provide Natural Ventilation in Tall Office Buildings (2017–22)." PhD diss., Illinois Institute of Technology, April 2022. Committee: Mahjoub Elnimeiri (IIT CoA), Michelangelo Sabatino (IIT CoA), Tomas Brock (IIT CoA), Raymond Clark (IIT CoA), and Mohammad Heidarinejad (IIT Department of Civil, Architectural, and Environmental Engineering).

Khan, Zahida. "Predicting and Simulating Outdoor Thermal Comfort-Based Human Behavior in Urban Environments (2018–22)." PhD diss., Illinois Institute of Technology, August 2022. Committee: Brent Stephens (IIT Department of Civil, Architectural, and Environmental Engineering), Matthew Herman (IIT CoA), Ronald Henderson (IIT CoA), Mohammad Heidarinejad (IIT Armour College of Engineering), and Mahjoub Elnimeiri (IIT CoA).

Geng, Camelia. "The Feasibility of Honeycomb Structure to Enhance Daylighting and Energy Performance for High-Rise Buildings (2018–22)." PhD diss., Illinois Institute of Technology, December 2022. Committee: Mahjoub Elnimeiri (IIT CoA), Ronald Henderson (IIT CoA), Michelangelo Sabatino (IIT CoA), Jamshid Mohammadi (IIT Armour College of Engineering), and Avery Schwer (University of Nebraska-Lincoln, Durham School of Architectural Engineering & Construction)

Alkoud, Amjad. "Investigating the Impact of Ultra-Tall Building Ordinances on the Future of Major Cities: Chicago & Dubai (–22)." PhD diss., Illinois Institute of Technology, November 2022. Committee: Mahjoub Elnimeiri (IIT CoA), Michelangelo Sabatino (IIT CoA), Eva Kultermann (IIT CoA), David Arditi (IIT Department of Civil, Architectural, and Environmental Engineering), and Kheir M. Al-Kodmany (College of Urban Planning and Public Affairs, UIC).

Kang, Liwen. "Health and Well-Being Benefits of Different Types of Urban Green Spaces (UGS): A Cross-Sectional Study of Communities in Chicago, U.S. (2018–23)." PhD diss., Illinois Institute of Technology, April 2023. Committee: Michelangelo Sabatino (IIT CoA), Ronald Henderson (IIT CoA), Maria Villalobos Hernandez (IIT CoA), Hao Huang (IIT Department of Social Sciences), and Nicole Ditchman (IIT Department of Psychology).

ACCOMPLISHMENTS

Press release by IIT on May 12, 2022.

Philanthropist, Business Leader, and LGBTQ Advocate, Fred Eychaner, Awarded Illinois Tech Honorary Doctorate of Architecture from Illinois Institute of Technology

Illinois Institute of Technology to award Fred Eychaner, a longtime activist whose work has shaped Chicago and the nation for more than 40 years, an Honorary Doctor of Architecture, honoris causa. The degree will be conferred at the university's Commencement ceremony on Saturday, May 14, 2022.

Eychaner is chairman of Newsweb LLC and president of Alphawood Foundation Chicago, and is known for his philanthropy, especially in support of LGBTQ organizations, HIV support organizations, arts institutions, public spaces, and historic preservation.

He has also had a lifelong dedication to preserving the architectural heritage of Chicago and the United States. He led efforts in the 1990s to restore and protect Louis Sullivan's masterpiece Auditorium Theatre in Chicago. Under Eychaner's leadership, the Alphawood Foundation led the comprehensive restoration of Frank Lloyd Wright's Unity Temple in Oak Park, Illinois.

"I am proud to honor those who have shaped our history for the better. Fred Eychaner has enriched Chicago and the world through his advocacy, visionary leadership, and service to others," Illinois Tech President Raj Echambadi says. "His architectural contributions have shaped Chicago, and his lifelong advocacy is an inspiration to everyone working to fulfill our founding purpose at Illinois Tech to liberate the power of difference by advancing technology and progress for all. I am proud to confer the university's highest honor upon this remarkable man."

Before his death, Louis Kahn designed Four Freedoms Park to honor President Franklin Delano Roosevelt on Roosevelt Island in the East River of New York across from the United Nations. The project floundered for many years until Eychaner and Alphawood stepped in to provide funding and technical support to staff the organization and to become the lead donor in realizing Kahn's amazing vision.

Eychaner sought Tadao Ando, now considered Japan's preeminent Modernist architect, for Ando's first project in North America in the early 1990s, and in 2018, completed the construction of another Ando-designed project, Wrightwood 659 art gallery.

President Barack Obama appointed Eychaner as a general trustee of the John F. Kennedy Center for the Performing Arts in September 2010, and reappointed him in 2016. Eychaner is one of the first openly gay members of that board. Eychaner served as co-chair of the Kennedy Center's Architect Selection Committee and is a member of its building committee. In 2014 Eychaner became the first Chicagoan to receive the prestigious Lambda Legal National Liberty Award for his lifetime of activism on behalf of the LGBTQ community.

Eychaner is a former board member of the Illinois ACLU, an early board member and leader of the AIDS Foundation of Chicago, and a founding board member and former chairman of the Joffrey Ballet. He also serves on the board of the Art Institute of Chicago, as a trustee of the Asian Art Museum in San Francisco, and on the Visiting Committee for Asian Art of the Metropolitan Museum of Art in New York. In 2015 Eychaner was inducted into the Chicago LGBT Hall of Fame.

In a ceremony held at The White House on March 21, 2023, Eychaner was awarded the National Medal of Arts (2021) by President Joseph R. Biden. The citation reads: "Fred Eychaner: From dance and architecture to arts education and a lifetime of LGBTQI+ advocacy, Fred Eychaner has helped give millions of people strength to be themselves and moved our country forward."

Prof. Joseph Orgel (left) and College of Architecture Dean Reed Kroloff (right) hooding Fred Eychaner (center) during the university's commencement ceremony, May 14, 2022. *Photo courtesy of Michael Goss.*

Raj Echambadi, President of IIT (right), awarding honorary Doctor of Architecture, honoris causa, to Fred Eychaner (left). College of Architecture Dean Reed Kroloff is seen in the background. May 14, 2022. *Photo courtesy of Bonnie Robinson.*

ACCOMPLISHMENTS

Honoring G.E. Kidder Smith

In conjunction with the publication of *G. E. Kidder Smith Builds: The Travel of Architectural Photography* (2022), three exhibitions curated by Angelo Maggi and Michelangelo Sabatino in Chicago examine his photographic legacy: *At Home in America* (Farnsworth House, Plano, Illinois) features a selection of residential buildings located throughout the USA; *Discovering Italy* (Italian Cultural Institute in Chicago) reveals Italy's modern architecture against the backdrop of its ancient past; and *Building Books* (IIT College of Architecture, S. R. Crown Hall) explores the tools GEKS used to produce visually engaging and deeply researched books.

Photos courtesy of William Zbaren.

At Home in America, Barnsworth Gallery, The Edith Farnsworth House, Plano, Illinois, May 22 - July 10, 2022

Discovering Italy, Italian Cultural Institute in Chicago, 500 N. Michigan Avenue, Suite 1450, May 23 - July 8, 2022

Building Books, IIT College of Architecture, Graham Resource Center (Lower Level S. R. Crown Hall), May 20 - July 8, 2022

IN MEMORIAM

Honey locust from inside Crown Hall. *Photo courtesy of Ron Henderson.*

LOBNA MITKEES

Statement issued October 25, 2022

We are heartbroken by the recent loss of Lobna. On behalf of the entire PhD community of students and faculty we offer our sincere condolences to her husband, children, and entire extended family.

Since Lobna joined our PhD program four years ago, her curiosity, determination, and passion for research made her a beloved member of our community. To honor her memory we will plant a tree on our campus in the not-too-distant future.

Sincerely,
Prof. Michelangelo Sabatino
Director PhD Program in Architecture
Inaugural John Vinci Distinguished Research Fellow.

The loss of a friend is so painful and heartbreaking. Lobna accomplished many important things in life. She is an inspiration to her children with her smartness, ambitions, and courage. We will miss you. Rest in Peace! My deepest condolences to the family and friends.

Ezgi Bay, Ph.D. '20
Assistant Professor at the Osmaniye Korkut Ata University

I met Lobna through her enthusiasm. She would always find a way to make everyone feel excited about her work. Whether a scholar or the head of her household, her mindset always was to give it all.

She was my dear friend. I will miss her. My thoughts are with her family.

Alejandro Saldaña Perales, PhD Candidate
PhD Program Admin. Assistant

Dear Lobna,

While we are still trying to process this loss, your sudden departure has taught us all how fleeting life is. It is what you leave behind that matters. I will always remember you as a young woman full of creative ideas and energy. I hope you find peace in your final abode.

Love always,
Nadia Shah, PhD

It seems like yesterday when I met Lobna in our old PhD office as she joined our program in the fall of 2018. Bundled up with energy and enthusiasm, she naturally connected with everyone in the community.

Words seem inadequate to express sorrow for the loss of my dear friend Lobna. Someone as special as Lobna will never be forgotten. Her loss leaves a big void in our lives. She will remain in our hearts forever!

My deepest condolences to her family in these difficult times.

Zahida Khan, PhD
Assistant Professor at Ball State University

During this sad time, our hearts are filled with personal and deep sorrow. Lobna was the first person to welcome me to the PhD Program, with her interested, enthusiastic, and friendly character. I will always be grateful for her energetic presence, her kind advice, and her compassionate demeanor. She was a strong force in our lives, full of passion, creativity, kindness, and love. We will miss her bright light in our community, but her legacy will always be with the lives she touched. My deep condolences to her loved ones.

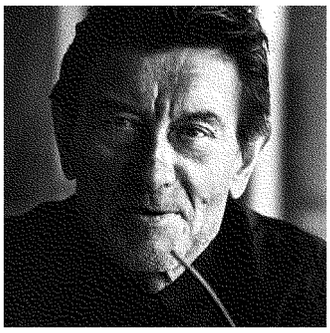
Alexis Arias Betancourt, PhD Candidate

The untimely passing of Lobna is a loss that the PhD program at IIT will remember forever. A furious personality that never shied away from asking the difficult questions along with a caring heart that brought everyone together, Lobna was an important part of our lives and she will be dearly missed. Our thoughts and prayers are with her family as she will always stay with us in our hearts.

Piyush Khairnar, PhD
Assistant Professor at Texas Tech University

HELMUT JAHN

Published on May 10, 2021, IIT Architecture



German-born American architect Helmut Jahn passed away on Saturday, May 8, at 81, after a bicycling accident near his suburban Chicago home. For decades, Jahn was a leading light in Chicago architectural circles, responsible for the design of signature buildings across the city and around the world, ranging from the iconic United Airlines terminal at O'Hare International Airport to the Sony Center in Berlin and the Doha Exhibition Center in Qatar.

Jahn came to the United States in 1966 to study architecture under Mies van der Rohe at Illinois Institute of Technology, though he never finished his degree. Instead, in 1967, at the invitation of former Mies designer (and later College of Architecture Dean) Gene Summers (M.ARCH. '51), he joined the office of C.F. Murphy. There, he helped design what would become one of the city's landmark buildings, McCormick Place, which blended daring structural innovation with elegant modernist design — a combination that would become a hallmark of Jahn's later work. After Murphy retired, Jahn renamed the firm Murphy/Jahn, and eventually simply JAHN.

Jahn was an architect's architect, equally adept at drawing, designing, and detailing, a powerful presence in rooms full of powerful people, and a dashing social figure whose sartorial sensibilities landed him on the cover of *GQ*.

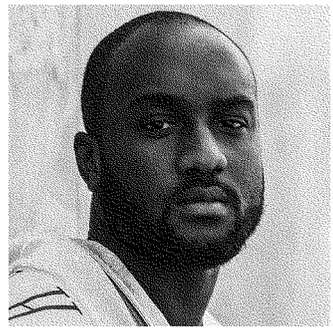
His practice and his design inclinations were distinctly international. But once settled in Chicago, he stayed, bringing the city some of its most recognized buildings, including (in addition to the United terminal) the John and Jeanne Rowe Village at Illinois Tech, 55 West Monroe (formerly Xerox), the Chicago Board of Trade Building, and the James R. Thompson Center, perhaps his most controversial building, due in equal measure to fights about its design, construction cost, and maintenance.

Jahn is reported to have quipped that the Thompson Center made his reputation internationally and killed it in Chicago, but he may have spoken too soon. Most of Jahn's biggest work came after the Thompson Center, and much of it landed quickly and comfortably in the pages of the architectural media.

"Helmut Jahn was one of those rare architects who seamlessly combined high design, high technology, and high-wire showmanship to create buildings — and a persona — that reminded people how architecture, and architects, can continuously inspire," says Dean and Rowe Family College of Architecture Endowed Chair Reed Kroloff. "He will be remembered as an important part of this city's remarkable architectural heritage."

VIRGIL ABLOH

Published on November 30, 2021, IIT Architecture



Virgil Abloh (M.ARCH. '06), a multi-hyphenate designer and Illinois Institute of Technology architecture alumnus, passed away on November 28, 2021, at the age of 41 after a two-year battle with cardiac angiosarcoma.

Abloh — whose work spanned fashion, furniture, music, and art, among other creative disciplines — was one of the most notable designers of his generation. He founded his design label, Off-White, in 2012, and was named men's artistic director at Louis Vuitton in 2018, becoming the first African American to take on the role. He is often credited with bringing streetwear to high fashion, while simultaneously paving the way for a more diverse and inclusive fashion industry. He collaborated widely with all manner of designers and companies, from Nike to Ikea to Evian.

Abloh was born in Rockford, Illinois, to Ghanaian immigrants and rose to prominence as a designer while living in Chicago. After studying civil engineering at the University of Wisconsin-Madison, he came to IIT to earn his Master of Architecture degree. Around that time, he became a friend and frequent collaborator of Kanye West, designing merchandise and album artwork for the rapper.

Abloh's professors and fellow students remember him as shy, kind, and remarkably cool. Architect Mary Ward, who was a teaching assistant in one of his studios, recalls Abloh wearing unique clothing and accessories of his own design. "We were in studio our first year, and he came in wearing a hoodie with fur sewn around the edge. I asked, 'Wow, Virgil, where did you get that?' He said he and his mom had made it together," explains Ward. "And he was lovely — quiet in the way that people who are observant are."

Abloh's master's thesis envisioned a skyscraper in downtown Chicago that leaned toward Lake Michigan "like a tree bending toward sunlight." The project was displayed at the Museum of Contemporary Art Chicago for his 2019 solo exhibition "Figures of Speech."

Abloh regularly cited how influential studying in S. R. Crown Hall was to him. In an interview with *Kaleidoscope*, he noted, "The moment that I stepped inside Crown I lost my breath. It unlocked my brain about the transcending quality of art." During his design career, Abloh frequently returned to Crown Hall. He directed multiple photoshoots for Off-White and Louis Vuitton inside the building and installed a Mies-inspired lightbox adjacent to the building's south stairway in 2019 to promote his collaboration with Nike.

Additionally, IIT introduced Abloh to the work of Rem Koolhaas, who had finished The McCormick Tribune Campus Center shortly before he arrived at the university. Abloh credited Koolhaas with teaching him how to "combine socio-political thinking with design," and the two went on to collaborate regularly throughout Abloh's career.

Abloh's career was tragically short, but he leaves behind a remarkable legacy. Through his personal perspective, his interest in all forms of design, and his dedication to inclusion (including a $1 million scholarship fund for Black American students), he left behind a creative space that includes more voices and celebrates the blending of all artforms.

ARTHUR TAKEUCHI

Published on March 8, 2023, IIT Architecture

Photo: March 2013. (Source: Sebastian Kulig, Flickr. https://www.flickr.com/photos/sebam2k4/2419143466.)

Arthur S. Takeuchi (B.A.S. ARCH '54, M.S. ARCH '59), a pupil of Ludwig Mies van der Rohe and an Illinois Institute of Technology College of Architecture professor for more than 50 years, passed away on October 28, 2022.

Mahjoub Elnimeiri and Jong Soung Kimm, both longtime faculty members at the College of Architecture who taught alongside Takeuchi, will lead two honorary lectures about Takeuchi on March 31 beginning at noon. A memorial gathering will take place beginning at 1 p.m. on April 1. Both events will be held in S. R. Crown Hall.

Ron Krueck (B.A.S. ARCH '70), founder of Krueck Sexton Partners, says Takeuchi's teachings have stayed with him for decades. "He opened a door that changed my life," says Krueck.

Takeuchi was a celebrated teacher during his long tenure as a faculty member, earning several teaching awards and acting as interim dean twice. "He was a student's professor," says Michael Glynn, adjunct professor at the College of Architecture. Takeuchi stepped away from teaching at the college in 2019.

Takeuchi's work as a practicing architect can be seen across Chicago. While working at Skidmore, Owings & Merrill (SOM), he was assistant chief architect of the Richard J. Daley Center (formerly the Chicago Civic Center), which epitomizes many of his Miesian teachings with its combination of daring structure and minimalist esthetics. Mies once said of the award-winning building, "I wish I had done it… here is architecture…you can sense it immediately."

Takeuchi's passion for architecture began to manifest itself while he was still in high school, during which he won first prize in the architectural drafting division of the Scholastic Industrial Art awards. He went on to attend the College of Architecture and earn bachelor's and master's degrees under Mies's tutelage. Takeuchi turned down an invitation to work on both 875 North Michigan Avenue (formerly the John Hancock Center) and the Willis Tower (formerly Sears Tower) to pursue an independent career. He joined the College of Architecture faculty in 1965 and opened his own firm in 1970, where he continued to garner accolades for his built and unbuilt works such as being the runner-up in the international competition for the Centre Pompidou in Paris. He was an early proponent of prefabrication, completing several striking Chicago-area schools using the then-unconventional building strategy.

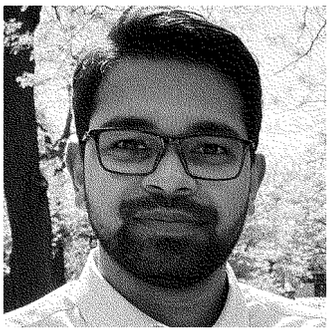
As a professor, Takeuchi inspired generations of students, including such luminaries as Krueck, David Hovey and David Hovey Jr., and Dirk Denison. Takeuchi's teaching and architectural legacies continue through his work and theirs.

DEAN AND DIRECTOR BIOGRAPHIES

Reed Kroloff is Dean of the Illinois Institute of Technology's College of Architecture. He previously directed Cranbrook Academy of Art and Art Museum in Bloomfield Hills, Michigan, and was Dean of the Tulane University School of Architecture in New Orleans, Louisiana, which he led through Hurricane Katrina and its recovery. The recipient of the American Academy in Rome's Rome Prize Fellowship, Mr. Kroloff was also Editor-in-Chief of "Architecture" magazine, then the world's largest circulation professional design magazine. Mr. Kroloff is a principal at jones|kroloff, a unique advisory practice that develops strategy for clients in the design industry. The firm's projects include the High Line, the Los Angeles County Museum of Natural History, the Whitney Museum of American Art, the National Library of Mexico, the Yale University School of Management, the Motown Museum, programming on the History Channel, and many others. Mr. Kroloff holds degrees from the University of Texas at Austin and Yale University, and has practiced architecture in Texas and Arizona.

Michelangelo Sabatino directs the PhD program in architecture and is the inaugural John Vinci Distinguished Research Fellow at the Illinois Institute of Technology. Trained as an architect, preservationist, and historian, his research broadly addresses intersections across culture, technology, and design in the built and natural environment. He has authored and co-authored numerous books, including "Pride in Modesty: Modernist Architecture and the Vernacular Tradition in Italy" (2011), recipient of the Society of Architectural Historians' Alice Davis Hitchcock Award, in addition to "Canada: Modern Architectures in History" (with Rhodri Windsor Liscombe, 2016), "Avant-Garde in the Cornfields: Architecture, Landscape, and Preservation in New Harmony" (with Ben Nicholson, 2019), "Making Houston Modern: The Life and Architecture of Howard Barnstone" (with Barrie Scardino Bradley and Stephen Fox, 2020), "Modern in the Middle: Chicago Houses 1929–75" (with Susan Benjamin, 2020), and "Carlo Mollino Architect and Storyteller" (with Napoleone Ferrari, 2021). www.michelangelo-sabatino.com

EDITOR BIOGRAPHIES



Dr. Piyush Khairnar served as an Adjunct Professor in the College of Architecture, IIT, and is an assistant professor in the Huckabee College of Architecture at Texas Tech University. He earned a doctorate in architecture from the Illinois Institute of Technology, Chicago in 2022, with a focus on technologies of the built environment. His doctoral research titled " Efficiency of Carbon Fiber Composite Structural Systems for Tall Buildings: A Parametric Simulation-Based Framework for Finite Element Analysis" explores carbon fiber composites as an alternative structural material for tall buildings. Dr. Khairnar's research utilizes parametric computer tools to simulate structural systems for finite element analysis providing data-driven solutions resulting in efficient system design. He is currently working on the circular design potential of advanced composite materials to investigate the viability of material application within the building industry. His research expertise includes advanced composite materials, structural analysis, computational design methodologies, building energy performance, tall building design, and performance-based design.

Prior to working as an educator, Dr. Khairnar has worked in the AEC industry for a number of years on a range of architectural and engineering projects. He was a co-organizer of the 6th annual international graduate student symposium of the IIT College of Architecture. He has been a peer reviewer and an invited critic and is currently serving as a co-editor to *Prometheus 06*.

Alexis Arias Betancourt obtained his Bachelor of Architecture degree from Universidad San Francisco de Quito in Ecuador, and completed his M.Arch and M.LA degrees in Architecture and Landscape Architecture at the Illinois Institute of Technology. Throughout his professional career in Quito and Chicago, he has focused on designing and developing public spaces that encourage community involvement and facilitate social interaction. He currently serves as a Research Assistant for the "Driverless City Project," an interdisciplinary team funded by the National Science Foundation (award# 1830642) comprised of roboticists, navigation engineers, and urban designers.

His doctoral research centers on examining the challenges of urban navigation for autonomous vehicles on State Street in Chicago and proposes an urban design-based approach to improving the safety of autonomous vehicle localization. This approach not only enhances current urban practices but also ensures the effective functioning of autonomous vehicles. The outcome is a framework of projected scenarios that will provide guidance for urban designers, policymakers, stakeholders, and the autonomous vehicle industry, highlighting the essential factors to consider when implementing these technologies and how to achieve valuable social, environmental, and experiential outcomes within the existing road infrastructure.

CURATOR BIOGRAPHY

Alejandro Saldaña Perales is a Mexican-born architect and aspiring urban scholar. He holds a Bachelor of Arts in Architecture (2011) from ITESM in Monterrey, Mexico, a Master of Science in Architecture (2018) from the Illinois Institute of Technology in Chicago, and is currently a PhD student at IIT conducting research on the role parks at private planned developments play in crafting healthy neighborhood scenes on Chicago's South Side. Alejandro worked for the government of Nuevo Leon, Mexico, designing, constructing, and managing the largest community center built to date in one of the most disadvantaged neighborhoods in the country. He served as mediator between government and community and his labor was considered essential for the center's program implementation and optimal operations.

He has worked in several architecture firms in both Mexico and the U.S., and managed his own firm focusing on residential and institutional architectural design and construction. Alejandro has experience as an architecture scholar at CEDIM and as a high school social science teacher in Monterrey. He has lectured in Mexico, Chile, and the United States, collaborated on the Mexican Pavilion for the 2016 Venice Biennale of Architecture, and has published several articles and essays for different digital publications and books.

He was coordinator for the Mies van der Rohe Society, and has served as the architectural guide for S. R. Crown Hall and Robert F. Carr Memorial Chapel of St. Savior (known as the "God Box") during the Chicago Architecture Center yearly Open House (2017–2019). Alejandro has also worked as an intern for the City of Chicago Department of Planning and Development on projects related to the Englewood neighborhood in Chicago. He is currently the PhD Program Administrative Assistant, collaborating with Professor Michelangelo Sabatino towards the publication of a new book about the South Side of Chicago, and serves as a Teaching Assistant at IIT's College of Architecture.