AMJAD ALKOUD, is a PhD Candidate at The Illinois Institute of Technology, and an architect graduated from IIT, Chicago in 2009 with a Master's Degree in Architecture. In 2003, he earned his first postgraduate degree in History and Theories of Architecture from Damascus University, the same school which awarded him a Bachelor Degree in Architecture in 2000. Amjad is a licensed architect and has worked with many International architectural firms and educational institutions in the USA, Syria, the UAE, and KSA. He has completed projects in Syria, Dubai, KSA, Iran, and Iraq. Amjad is a member of the Syrian Syndicate of Architects, the UAE Society of Engineers and an associate member of the American Institute of Architects (AIA).

Amjad’s Doctoral research focuses on Ultra-tall buildings Ordinances (UTBOs), and investigates the interactions between current building ordinaries in deferent cities and the development of Ultra-tall buildings (i.e., buildings above 1000 feet high). The research tries to understand and explain the role and dynamics of different municipal policies in the creation and shaping Ultra-tall as a new, wide-spread urban morphology, The research also aims to understand how existing set of ordinances could be improved to help better shape the future of cities.

A comparative study between two distinctive city ordinances will be conducted: The first city is Chicago, the cradle of the "modern" High-rise, with 318 towers of 100-plus meters and 5 towers of 300-plus meters, and the second is Dubai, the experimental land of super-tall, with 298 towers of 100-plus meters and 22 towers of 300-plus meters as per today's CTBUH data. The comparison is being conducted by using examples and case studies from both cities, supported by interviews, surveys, data collection and interpretation to find the detected patterns and regularities that determine ultra-tall development aspects in order to evaluate the research hypothesis.
Omar Almahdy

PhD Candidate in Architecture
College of Architecture
Illinois Institute of Technology
oalmahdy@hawk.iit.edu
Mehdi Ashayeri is a Ph.D. Candidate in Architecture, Technologies of the Built Environment (TBE) track at Illinois Institute of Technology. Ashayeri holds B.Sc. in civil engineering and M.Sc. in architecture from I. Azad University, Tehran Central Branch in Iran. Ashayeri served as R&D, researcher, architect and engineer in Iran and the United States for over fifteen years. Ashayeri, as a co-PI, developed and published 7-compilation national design-code for high-performance and sustainable buildings granted by Ministry of Road and Urban Development of Iran.

Ashayeri’s Ph.D. research focuses on the nexus of Indoor Environmental Quality (IEQ) of buildings and outdoor conditions in urban context with respect to sustainable built environment goals. His research aims to develop a hybrid framework which captures key urban attributes such as meteorological, air pollution, mobility, and human activity patterns through application of artificial-intelligence-based data-driven approach and synthesizes them with simulation-based techniques to help explore IEQ of buildings at the immediate urban context. The outcome of Ashayeri’s research has the potential to be used by architects, engineers, planners and policy makers in planning and design of energy efficient and low-carbon built environment and reducing health impacts imposed by outdoor conditions.
Anat Mor-Avi is an experienced practicing architect, artist and currently a Ph.D. candidate. Over the last 20 years, she has focused on designing of learning environment facilities in the USA and Israel, while empowering the interrelation between the evolving pedagogies and the physical surrounding. Challenged by building with bricks and mortar for dynamic education, Mor-Avi returned to the academic world in order to thoroughly investigate the connection between architecture, design, and education. As a pedagogical architect, Mor-Avi acts as a consultant for the Israeli Ministry of Education and designs innovative learning-driven projects.

Mor-Avi’s research topic examines the contribution of architectural and design attributes in creating a collaborative culture supporting creativity. The research focuses on the spirit of ‘WE’ among faculty and among students, as well as between the two entities, vs. today’s spirit of ‘I’, in learning-driven environments. From this work, a proposed platform of “Architecture of Connections” will explore the architectural intelligence of a space related to WE culture—"SPACE WE-Q"—“while focusing on affordances of motions and emotions.
Ezgi Bay

Ph.D. Candidate in Architecture
College of Architecture
Illinois Institute of Technology
ebay@hawk.iit.edu

Ezgi Bay is a Ph.D. candidate in Architecture at Illinois Institute of Technology, Chicago. On her career, she has been exploring sustainable design alternatives that can bring equality in societies and urban areas. Bay is a recipient of a “Net Zero Energy Home Design Competition” award organized by the Department of Energy in 2017. She is inspired by the strategies developing with the ideas of interdisciplinary work between architects, engineers and building scientists. Bay holds a M.Sc. in Architectural Design from the Istanbul Technical University, Turkey (2013).

Bay conducts a research on the fields of urbanism, architectural design and building technology. She is particularly interested in the interrelation between housing, climate and people. Her dissertation concerns with indoor thermal comfort, building performance and natural ventilation. Through energy simulation and CFD analysis, she has explored urban and architectural possibilities to improve current performance of the mass housing in the East Mediterranean region. Also, she analyzes the interaction between residents, domestic areas and outdoor climate with a field study. Her study challenges to improve social housing standards in terms of typologies and enclosures in connection to the local climatic conditions.

TOKI Etiler Project, Gaziantep
Liwen Kang is a Ph.D. student in Architecture at Illinois Institute of Technology. During her Ph.D. study, Kang serves as teaching assistant for different courses, such as Environment and Building Systems and The Natural History of Cities. Kang is a LEED Green Associate since 2016. With a background in landscape architecture, Kang holds a master degree in Landscape Architecture from Illinois Institute of Technology in 2016 and she won the Honor Award, granted by the Illinois Chapter of the American Society of Landscape Architects (ILASLA). Before starting her Ph.D. journey, Kang worked for the Council on Tall Buildings and Urban Habitat (CTBUH) in the Publications & Design team from 2016 to 2018. Kang also worked as a volunteer for various organizations, such as Chicago Architecture Foundation (CAF), ASLA, and Chicago International Film Festival.

Kang’s research focuses on exploring the impacts of the built environment on mental health, using the concept of Nature-Based Solutions (NBS), which is progressively developed by IUCN and EC. Her research aims to address challenges associated with increasing urbanization, such as increase of urban temperature and urban heat island effect by using actions inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience.

(Source: Diverse & multiple benefits and co-benefits developed by European Commission (EC))
Piyush Khairnar is a Doctoral Student in Architecture at Illinois Institute of Technology. Piyush joined the program in Fall 2018 after working as Project Designer for Ross Tarrant Architects specializing in design of educational facilities. Currently working as the Administrative Assistant to the Ph.D. program in Architecture, Piyush has also worked as Teaching Assistant to graduate and undergraduate students for Structures courses. Piyush holds a Master of Architecture degree with advanced standing from Illinois Institute of Technology (2017).

Piyush’s doctoral research is focused on the areas of architecture and building structures with special interest in tall and supertall buildings. Piyush is investigating the potentials of Carbon Composite as an alternative structural material in buildings. His research is exploring the structural properties of carbon composites, performance of structural systems in tall buildings along with the environmental impact of the material in terms of embodied energy and recycling potential. Currently Piyush is working on understanding the behavior of tall buildings under severe wind conditions using computer based simulations, statistical analysis, and optimization.
Zahida Khan is a Ph.D. student at College of Architecture at Illinois Institute of Technology. With over 12 years of professional experience and her current academic pursuit, Zahida fosters creativity and its practical application. She strongly advocates the need for applied research in built environment. She is a recipient of academic merit scholarships at CoA-IIT for her Masters and Ph.D. program. She is a registered architect with Council of Architecture, India and a certified green professional delivering projects as a LEED AP (BD+C) by US Green Building Council and PQP (Pearl Qualified Professional) by AbuDhabi Urban Planning Council.

Zahida’s area of interest includes public spaces, tall urbanism, microclimates, human behavior algorithms, data-driven cities and artificial intelligence in architecture. Her research envisions human centered design towards the future of sustainable cities.
Yohan Kim is a Ph.D. Candidate in Architecture at Illinois Institute of Technology and a LEED Accredited Professional. He received his M.Arch from Illinois Institute of Technology and his B.Arch from Inha University, South Korea. His professional experience in Japan and South Korea includes mixed-use, residential, and commercial projects.

Kim's research focuses on the impact of double-skin façade (DSF) configurations on natural ventilation in tall office buildings (i.e., buildings of or taller than 200 meters). Specifically, his research uses an integrated framework to quantify and assess the natural ventilation performance of a tall office building with DSF configurations, as climatic and design parameters vary. He also tries to optimize the DSF configuration (e.g., building segmentation, opening size and location, and cavity depth) and the lease span of tall office buildings based on indoor operative temperature, indoor air speed, airflow rate, and air change rate under specific climatic conditions in two different locations: Chicago and Shanghai. His research will provide further insight into the indoor airflow behavior in the cavity of DSF and the open office spaces on upper floors with respect to natural ventilation and thermal comfort.
Lijian Ma, is a PhD student in College of Architecture at Illinois Institute of Technology. Ma has bachelor and master degree of architecture design in Politecnico di Torino, Italy. After graduation in Italy, Ma worked in China as architect and project manager more than two years. In the summer of 2019, Ma started his PhD program in Illinois Institute of Technology.

Ma’s research interests center on sustainable architecture, life cycle assessment, embodied energy, environmental impacts, energy efficiency, advanced technology and tall buildings. His research tries to understand the sustainable potential of tall buildings and explore efficient structure and technologies to reduce environmental impacts. He tries to make contributions on the limitations and challenges in the relevant research fields by using methodologies such as life cycle assessment, energy simulation, statistics, computational analysis, structural analysis and optimization.
Lobna Mitkees, studied architecture and urban planning with focus on multi-disciplinary approach for environmental cautious design. Mrs. Mitkees accomplished her Bachelor degree in Architecture Engineering from Ain Shams University, Egypt(*2010); and a duel Master Degree in Integrated Urbanism and Sustainable Design from Stuttgart University, Germany and Ain Shams University, Egypt. (*2013), Throughout her academic and professional career, she was awarded several prestigious scholarships. This includes: DAAD Master of Science Scholarship; nominated to join EU Tempus Project “CEIAC” between Ain Shams University and Stuttgart University; she also received the DAAD scholarship to join SLE training at Humboldt University of Berlin. Mrs. Mitkees practiced in local and international firms and worked in few development projects in informal settlements in Cairo. She combined her professional experience with her academic interest and worked as an Architecture Educator prior her arrival to the USA.

Mrs. Mitkees understands that in order to achieve a sustainable and efficient design an integration of different fields of knowledge is crucial. Her motivation to join IIT PhD program stems from the understanding that design based research challenges one to rigorous and creative thinking. Her research interests include Sustainable Architecture, Environmental Cautious Design, Environmental planning, Energy Efficiency in Buildings, Climate Change, Landscape Infrastructure, Thermal Comfort.
Marcos Petroli is an architect, planner, and architectural historian whose research addresses intersections between culture, architecture, and technology in the rise of modern civic monumentality in the Americas. He taught studio, and history and theory of architecture in Brazil at Caxias do Sul University (UCS) and at the Vale do Taquari University (UNIVATES). Currently, he is a PhD candidate at Illinois Institute of Technology (IIT) and a Board Member at Docomomo US/Chicago, a branch of the global preservationist organization concerned with the heritage of modern architecture.

This dissertation discusses the expansion of the post-war, modern architecture lexicon by the use of arcuated structures. Arches, vaults, and domes, while uncommon in modern architecture historiographies, gave rise to an “appropriate character” in public buildings, by contrasting special civic programs from common buildings in mid-century architecture in the United States. More than a functional solution to masses requiring large spchallenges, the sociological character of public buildings developed by these structures came to the predominance of trabeated systems, creating oppositions between modern architects among themselves. Ultimately, this research aims to demystify the association of arcuated structures with a pure emotional, “expressionist” condition, by highlighting the alliance between architecture and engineering to construct great mid-century American monuments.
Nadia Shah, is a PhD candidate in Architecture at Illinois Institute of Technology. Shah earned her master’s degree in city and regional planning from University of Memphis and her bachelor’s degree in architecture from National college of Arts, in Pakistan. Her main research interest is in equitable housing through inter- and transdisciplinary approaches in policy and design. Her work experience in the United States has been with community development corporations and her focus in research papers has been on cost efficient, affordable and equitable housing solutions in the transcontinental context.

Shah’s PhD research centers on providing further insights on ‘why’ and ‘how’ the standardized planned and built settlements in the post colonial Global South have been incrementally appropriated by their residents (both individually and collectively). Her project focuses on Korangi Town, a mid century mass housing project established for the resettlement of the poor migrant population of Karachi, Pakistan (that was soon abandoned after the completion of its first stage in the 1950s). The research provides a theoretical framework for assessing incremental appropriations and development within the formal city. It presents morphological inquiry, that follows the physical evolution of a planned settlement chronologically, as a methodology for such study.
Yen-Hang Yang

PhD Candidate in Architecture
College of Architecture
Illinois Institute of Technology
yyang123@hawk.iit.edu