

SCHOOL OF ARCHITECTURE, DESIGN & URBANISM

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DR. KARLA SALDANA OCHOA'S PRESENTATION "EVOLVING DYNAMICS: INTERPLAY OF HUMAN AND MACHINE INTELLIGENCE AND ARCHITECTURAL PRACTICE" FROM THE SCHOOL OF ARCHITECTURE, UNIVERSITY OF FLORIDA TO IAC STUDENTS



IAC
SCHOOL OF ARCHITECTURE,
DESIGN & URBANISM



UF College of Design,
Construction & Planning
UNIVERSITY OF FLORIDA

**ARCHITECTURE LECTURE
SERIES PRESENTS**

DR. KARLA SALDANA OCHOA

Karla Saldana Ochoa is a Tenured Track Assistant Professor in the School of Architecture at the University of Florida, and a faculty affiliate at the Center of Latin American Studies and FIBER, the Florida Institute of Built Environment Resilience at the University of Florida. Karla is the director of SHARE Lab, a research group focused on developing projects that leverage the interaction between Artificial Intelligence (AI) and human intelligence applied to boost creativity in architectural design and create tools to analyze Big Data of Urban Phenomena. Karla is an Ecuadorian architect with a Master of Advanced Studies in Landscape Architecture and a Ph.D. in Technology in Architecture from ETH Zurich. Her Ph.D. researched the integration of Artificial and Human Intelligence for an accurate and agile response to natural disasters.



Asst. Prof. Dr. Karla Saldana Ochoa
School of Architecture, University of Florida

WEBINAR ON

EVOLVING DYNAMICS: Tools and Instruments, examples of the Interplay of Human and Machine Intelligence and Architectural Practice

MON 12 FEB 2024 14:00 PST

ZOOM MEETING

**MODERATED BY
DR. DANYAL AHMED**

EVOLVING DYNAMICS: Tools and Instruments, examples of the Interplay of Human and Machine Intelligence and Architectural Practice
The presentation will introduce an innovative AI generative framework (Text2Form3D) designed to showcase an equilibrium between AI algorithms' efficiency and human designers' critical thinking. We aim to guide AI-generated 3D designs toward achieving precise structural performance goals and capturing the qualitative features that define the architectural design process. Using this framework, we will present case studies showcasing the design of diverse architectural elements, including roofs, towers, and bridges. While AI is often likened to a problem-solving tool like a hammer or lever, this presentation will show it as an instrument akin to a pen, paper, or violin, which requires a masterful human to be used effectively, just as a violin needs a skilled musician to produce masterful music. This lecture urges a departure from traditional perspectives on AI, showcasing projects that integrate human imagination and AI's computational power.



Dr. Karla Saldana Ochoa, a Tenured Track Assistant Professor from the School of Architecture at the University of Florida delivered a lecture to the School of Architecture students at IAC.

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STUDENTS UNVEIL INNOVATIVE FURNITURE CREATIONS AT SCHOOL OF ARCHITECTURE, DESIGN & URBANISM

The fourth-semester students of Interior Design have recently showcased their remarkable talents through the creation of innovative furniture pieces that redefine the boundaries of design and functionality.

Here's a sneak peek into the awe-inspiring creations- Guided by their passion for design and fueled by their academic knowledge, the students embarked on a journey to translate their creative visions into tangible masterpieces. Drawing inspiration from diverse sources, they seamlessly blended form and function to craft furniture pieces that are as aesthetically captivating as they are practical. Each furniture piece is a testament to the students' ingenuity and dedication to their craft.

From initial sketches to prototyping and refinement, they navigated every step of the design process with precision and flair. With an emphasis on innovation and sustainability, they explored novel materials and techniques to bring their concepts to life. The showcase features a diverse range of furniture designs, each showcasing the unique style and personality of its creator. From sleek and minimalist chairs to modular storage solutions and avant-garde lighting fixtures, the collection is a testament to the students' versatility and creativity.



INTERIOR DESIGN 4TH SEMESTER PROJECT FURNITURE DESIGN

NCA AND INSTITUTE FOR ART & CULTURE'S KNOWLEDGE EXCHANGE



The students of School of Architecture, Design and Urbanism of the Institute for Art & Culture (IAC) visited the final year thesis display of the Departments of Architecture and Interior Design at the National College of Arts (NCA), Lahore. IAC students were accompanied and guided by their respective Design Studio teachers for this knowledgeable visit. Students, while exploring the architectural and interior projects, also visited and interviewed works of students from painting, sculpture, among other departments. This interdisciplinary exchange of knowledge and the IAC and NCA students resulted in broadening the conceptual perspectives of students while keeping in view their cultural and geographical parameters.

SCHOOL OF ARCHITECTURE, DESIGN & URBANISM PARTICIPATION IN "VOICES OF WOMEN IN ARCHITECTURE SYMPOSIUM"



The School of Architecture, Design & Urbanism IAC participated in a symposium titled the "Voices of Women in Architecture" held from January 11 to 19, 2024 simultaneously in London and Lahore. The symposium featured distinguished keynote speakers, Yasmeen Larri, a renowned female architect, who discussed her work on "Barefoot Architecture," and Igea Troiani, Head of the Department of Architecture, London South Bank University, who discussed the work of prominent female architects. The event included a session where young female architects had the opportunity to interact with senior architects.

Additionally, there were three panel discussions covering various aspects of the field, such as practitioners working on refugee and migrant architecture worldwide, challenges faced by female architects in academia, and insights from practitioners in office culture. IAC particularly engaged in a workshop where participants collaborated to formulate questions and solutions regarding the challenges female architects face in the field. The entire event proved to be both informative and educational. Along with students, the IAC was represented by Ar. Hamna Ahmed and Head of the Department, Dr. Danyal Ahmed at the symposium.

STUDENTS CULTIVATE DISH GARDENS FOR INTERIOR LANDSCAPE DESIGN

We would like to showcase our latest work from the world of Landscape Design Interiors, where students have embarked on a journey of creativity and horticultural mastery. In a captivating project, by Ms. Muntaha Rana and her students have crafted enchanting dish gardens, each inspired by a unique theme, meticulously arranging plants and soil to bring their visions to life. Students delved into the art of dish gardening, combining their passion for design with their love for plants. With a palette of lush greens, vibrant blooms, and textured foliage at their disposal, they set out to curate miniature landscapes that tell captivating stories. From tranquil Zen gardens to lush tropical paradises and whimsical fairy realms, each dish garden is a reflection of its creator's imagination and inspiration. Drawing from diverse sources such as literature, art, and personal experiences, students infused their designs with meaning, symbolism, and a touch of magic.



PAINT WORKSHOP CONDUCTED AT IAC



We are thrilled to share our latest endeavor organized by Ms. Muntaha Rana who initially planned a visit of the Diamond factory that turned into something truly extraordinary—a workshop where students got the chance to unleash their artistic talents by painting stunning murals within the studios. Here's a glimpse into the enriching experience - The diamond paint factory, known for its precision and craftsmanship, opened its doors to budding Interior Designers in a unique collaboration aimed at merging artistry with industry. Students were welcomed into the vibrant studios, where a blank canvas awaited their imaginative strokes. Guided by experienced mentors, they embarked on a journey to transform the studio walls into captivating masterpieces, with paintbrushes in hand and inspiration in their hearts, students dived into the creative process. From bold strokes to intricate details, every mural reflected the unique style and perspective of its creator..

CAKE - COLLECTIVE ACTION FOR KNOWLEDGE ECONOMY

By Prof. Dr. Muhammad Yusuf Awan
Dean, School of Architecture, Design and Urbanism, IAC Lahore

Today's World is the World of Globalization and in continuation, of meaningful commercialization as well. Collective action is only effective, fruitful and purposeful if points such as following are considered:

1. PLANET PROTECTION

First of all, security and safety of the planet of Earth is essential. Protection of the planet is the common goal of all Human living over the planet. International Unity is needed beyond nations, colors, races, faiths, rich and poor. All Humans over the Planet need to understand the extreme importance of ecological balance. They must realize that humans alone do not totally own the planet but they also share it with others. Others include all kind of animals, birds and many other living beings. Unity among all sections of human society is needed. This is required to define unanimous National Goals with involvement of public at large. These goals must be in line with international goals and international unity.

2. TRUST THE PROCESS

To ensure unbiased information and also allow an equal access to all the people acknowledging their abilities.

3. CHANGE THE PATH

The path of progress starts from lower economic sections of the society by taking them into confidence, by encouraging them, by respecting them and honoring them. Change the terminology to respect them. All people are of value, and none higher or lower than others; up to gross-roots.

4. POLICIES

The public policies made by bureaucrats and technocrats without involvement of the people always fail. "Small is beautiful". De-centerize! And yes, top-down always fail because it maintains stratification and lacks both productive contribution, universal VOICE.

5. AGRICULTURE

Be simple and down to the Earth. Agriculture is real culture. We love mainly agricultural economy which is required to be enhanced with knowledge of agricultural culture and superior innovations. Unfortunately our academia and students in the higher educational institutions are almost fully isolated from the ground realities. Unfortunately, students in the universities from large urban centers are unaware of even names of major crops, their cultivation and harvest seasons. This goes hand-in-hand with social stratification based on financial wealth: again de-centralize; particularly necessary is reduction of size of urban centers, because they create their own climatic issues, as well as disconnection with sources of basic production of essentials. This is not an issue to Pakistan specific rather a common issue of all urban centers of the world.

6. FRIENDSHIP AMONG ALL CLASSES

Promotion of friendship among all sections of the society is highly needed. CAKE is not possible until friendship is not promoted with people living in villages, labor colonies and slums. UNLESS friendships and real relationships ARE promoted, success is impossible.

7. SHARING INFORMATION

Sharing the "Information" with all is required to have more deeper analysis towards deriving innovative Knowledge. Quality of Knowledge is increased only by sharing it. To be more specific "Information is not Knowledge". Many students from countries where unquestioned obedience is required, rely on "information transfer" rather than recognition of actual "understanding" and therefore "knowledge". For knowledge to be created by a person must have the ability to question that which is being taught. Being given "information" about one's geography is of no relevance if a person has no experience of that geography. It would be learning only the names of Kings and places of England etc. Thus such information will be of little value.

8. KNOWING GEOGRAPHY

Knowing and becoming part of the people and environment around is required. Unfortunately, most people including particularly students and academia lack in it. They have too little knowledge of the geography, geology, rivers, mountains, districts and divisions of various administrative regions and provinces of the country. Some even do not know the number and names of the districts of their province.

9. SENSE OF OWNERSHIP

There is serious lack of National ownership. Here the people, students, teachers, bureaucrats and everyone is only committed to his personal promotion. That is why there is dominant greed, disease of hiding stolen information, frequent plagiarism, copying and pasting, publications in impact factor journals but no improvement in intellect, maturity and confidence.

10. NATIONAL OWNERSHIP

A sense of National Ownership, Commitment and Dedication is required to define the National Destiny and to achieve it with Collective Action. A "sense of ownership" will only ever evolve in Pakistan and in similar countries IF the essential structure of the society is changed, where young people can have a sense that they are of VALUE in and of themselves in command of THEIR OWN destinies... which, of course, includes the "right to choose their own profession, marriage.



MEET THE EMPLOYEE



AR. SAJAL RIZWAN

Introducing Sajal Rizwan, a dedicated project architect at IACPL. Having an architecture degree from UET Lahore, she is currently pursuing a master's in Architecture with research work focusing on the "Socio-political influences on urban nodes of Lahore". Sajal has a diverse field experience of local and international projects. Joining IACPL in May 2023, she is driven by a desire to enhance professional competitiveness in the international market, bringing expertise in Highrise sustainable development.

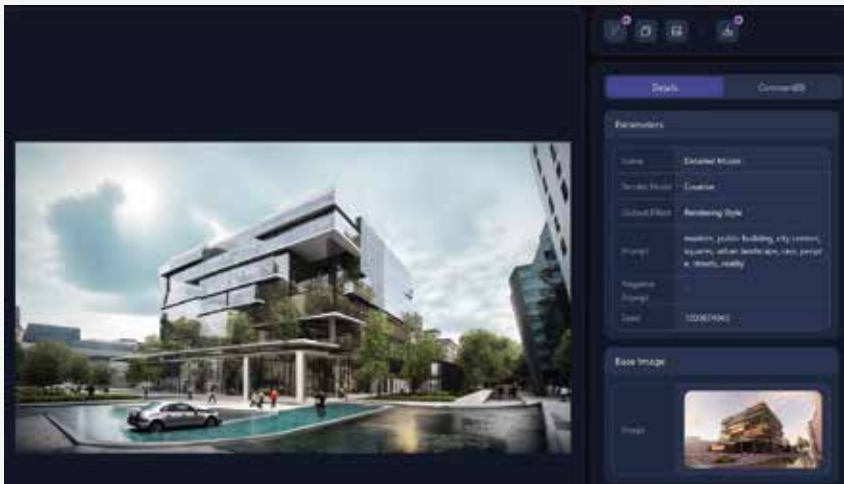
CRAFTING ECO-FRIENDLY INTERIOR SPACES



Incorporating sustainability into interior design involves several key factors. Interior Designers prioritize eco-friendly materials like reclaimed wood, bamboo, and natural materials to minimize environmental impact. Energy-efficient lighting, including LED fixtures, reduces electricity usage, while smart home technology optimizes energy consumption. Water-saving plumbing fixtures and low-VOC paints enhance indoor air quality and reduce water waste. Additionally, designers emphasize longevity and durability in furniture and decor choices, encouraging timeless designs that endure through time. Incorporating

biophilic design elements, such as indoor plants, further promotes wellbeing and connection with nature. Furthermore, sourcing locally-made products reduces carbon emissions associated with transportation, contributing to a more sustainable design approach. Sustainable interior design encourages environmental responsibility and fosters healthy, harmonious living environments.

AI TOOL OF THE MONTH



The AI tool of the month is lookx.ai, available for a limited free trial. It's accessible as a plugin for software like Sketchup or Rhino, or online at lookx.ai. The platform transforms sketches or crumpled paper into 3D models, tailored for architecture enthusiasts. It features three main components: Inspiration Generator, Model Training, and Sharing Community,

housed in LookX AI Cloud, a user-friendly software-as-a-service (SaaS) solution. Leveraging ArchiNet, an architecture-focused database, LookX AI accurately interprets architectural concepts using advanced algorithms. According to Tim Fu from Zaha Hadid Architects, LookX's specialization in architecture sets it apart, enabling the creation of buildings from visual prompts. Its standout feature is the ability to showcase projects from simple massing to conceptual renders, demonstrated in our office at IACPL. The platform facilitates the creation of inspiring drawings, architectural rendering, and customizable options, fostering community engagement through collaboration and knowledge-sharing. While user-friendly, mastering all features may have a learning curve, and the quality of generated models depends on training data relevance and quality. Despite offering customization, users may encounter limitations in tailoring images to exact specifications.

CHALLEY SHAREEF TOMB, MOSQUE AND MADRASAH COMPOUND



The IACPL Team visited the revered Tomb compound of Challey Shareef, encompassing the Tomb, Mosque, and Madrasah. Designed by renowned architect Kamil Khan Mumtaz, the compound stands out for its profound adherence to sacred geometry, imbuing every aspect with religious symbolism. Under construction, it showcases local artisans' craftsmanship, using traditional materials like brick and lime mortar. This blend of techniques and design principles accentuates both

architectural grandeur and spiritual sanctity, honouring regional heritage and site reverence. Additionally, the use of natural materials enhances the compound's aesthetic and spiritual appeal, harmonizing with the environment.

EVENTS AND TRAININGS

CAPACITY BUILDING LANDSCAPE LECTURE SERIES

Our esteemed team member "Ar. Aamir Qureshi Baba" who is also a renowned landscape consultant had delivered a lecture on landscape architecture. The lecture on landscape architecture is a part of series of lectures plan to equip the architects at IACPL with the knowledge of landscape architecture. The first lecture of this series was found insightful by IACPL staff.



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