

# Osama Elrawi, Ph.D.

Osama Mohammad Elrawi, Professor of Architecture, Department of Architectural Engineering, Faculty of Engineering and Technology, Future University, Cairo Egypt, [osama.mohamed@fue.edu.eg](mailto:osama.mohamed@fue.edu.eg)

## Professional Profile

Working in practice, teaching, and research since 1981. Prepare and conduct lectures and seminars to undergraduate and graduate students. Advise students with respect to academic performance, career opportunities, and pursuit of advanced degrees. Mentor and advice new academics, typically teaching assistants, research assistants, and junior faculty members. Carry out administrative and managerial duties, including chairing committees, and representing the university in the community.

## Personal Profile

Birthdate: 12<sup>th</sup> June 1958

Nationality: Egyptian

Status: Married

Home address: 37 Mohamed Elnady street, Nasr city, 11471, Cairo, Egypt

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## Education

### **Ain Shams University – Cairo, Egypt**

Ph.D. in Architecture - 1993

Dissertation: "Characteristics of Spatial Urban Pattern in Arab City"

### **Ain Shams University – Cairo, Egypt**

M.A. in Architecture - 1988

Dissertation: "Comparative Analytic Study for Interior Spaces in Andalusian Architecture"

### **King Saud University – Riyadh, Kingdom of Saudi Arabia**

B.A. of Architecture - 1981

Areas of Concentration: Architecture

Honors Thesis: "The Design of Performing Arts Centers"

# Professional Career Experience

## Academic Institutions

### **Al-Azhar University, Egypt**

Associate Professor of Architecture  
Department of Architecture  
Faculty of Engineering

### **MIU: Misr International University, Egypt**

Associate Professor of Architecture  
Department of Architecture  
Faculty of Engineering

### **FUE: Future University in Egypt**

Professor of Architecture  
Department of Architectural Engineering  
Faculty of Engineering and Technology

## Courses

### **History and Theories of Architecture**

- Demonstrate knowledge and understanding of scientific background (theories and history) of similar building types.
- Define design values and illustrate in drawings and sketches possible solutions.
- Define the principles of building formation, including the application of design principles, design methods and their relation to human sensations.

### **Human Studies in Architecture**

- The Multisensory Nature of Perception, Symbolism and Aesthetic Response, Familiarity versus Aesthetics, Attributes of Residential Environments, Functional Categories and Basic Human Requirements, The Logic of Space.

### **Architectural Design**

- Visual relations of the group of buildings and their conformity with the general layout and context. The design should comprise major elements having wide structural spans. Provision for natural lighting and ventilation.
- Application of new technologies to enhance design concepts.

## Execution Design

- Regarding technical issues, how CNC technology did affected the execution of buildings.
- Sketches and diagrams needed to clarify in all main stages of design and execution, the way in which building industry is becoming a main tool in building construction.
- The research and understanding of the function of material in design, the ability to design with material, and the techniques of manipulating representations of material structures through digital tectonics that has become a burgeoning part of the architectural knowledge.

## Community Development and Participatory Design

- The existence of privacy and territoriality in traditional Arab cities regarding the morphological analysis of the urban spatial pattern.
- Land utilization, population density, site and services projects for the low income groups. The districts closely integrated physical and social fabric and the way in which social, economic, and cultural factors could all together affect the development of that community.

## Related Experience

**Original Patent Pending for the invention of:**  
1996

**“Adjustable Radial Scaffolding for Arch Construction”**

***Academy of Scientific Research and Technology – Egypt.***

**Architectural Consultant for:** The Ministry of Awkaf, Egypt  
2001-Present.

**Joining ios Developer University Program. Developing innovative apps for I pad.**  
Apple Developer Program Enrollment.

**Strategic Leadership Seminar and Workshop.**

Institute of International Education – IIE

Lotus Scholarship Program. Feb. 2013

[www.iie.org/Worldwide Offices](http://www.iie.org/Worldwide Offices)

## Papers and Publications

**Islamic Architecture and Information Technology** العمارة الإسلامية وتكنولوجيا المعلومات

**1<sup>st</sup> International Conference & Exhibition on Architectural Conservation between Theory and Practice**

14-16 Mars, 2004 Dubai, United Arab Emirates

دراسة تحليلية مقارنة لمبادئ علم الجمال في العمارة الإسلامية

**Analytic Comparative Study for the Aesthetic Principles in Islamic Architecture**

**AL-AZHAR 9<sup>th</sup> NENGINEERING INTERNATIONAL CONFERENCE**

AEIC 12-14 April, 2007 Cairo, Egypt

المقرنص فكرة نحو نظام لعلم التشكل

**The Muqarnas, A concept Towards a System for The Science of Formation**

**AL-AZHAR 9<sup>th</sup> NENGINEERING INTERNATIONAL CONFERENCE**

AEIC 12-14 April, 2007 Cairo, Egypt

تصميم المواقع في العمارة الإسلامية

**Landscape Design in Islamic Architecture**

**The First International Conference for The Islamic Arts and Architecture**

Cairo University, 27-29 October, 2007 Cairo, Egypt

التراث والفنون: التواصل المعرفي بين التراث والمعاصرة

**Heritage and Arts: Knowledge Communication Between Heritage and Modernity**

**World Conference of Al-Azhar Alumni 2008 Kuala Lumpur Convention Center**

Organized by Government of Malaysia and University of Al-Azhar

15-18 February, 2008 Kuala Lumpur, Malaysia

**The Morphology of Spaces in Islamic Cities**

Regional Architecture and Identity in the Age of Globalization

13-15 November, 2007 Tunis, Tunisia

## **Regenerating Architectural Elements Using AI The Case of Muqarnas**

3<sup>rd</sup> International Conference of the Arab Society for Computer Aided Architectural Design (ASCAAD 2007), Embodying Virtual Architecture [The Bibliotheca Alexandrina](#), 28-30 November, 2007, Alexandria, Egypt.

<http://www.ascaad.org/conference/2007/023.PDF>

## **Identity, Character, and the Urban Pattern The Case of Islamic Cities**

Second International Conference of Architecture and Urban Planning Departments  
Faculty of Engineering, Ain Shams University ARUP 2008  
25-27 October 2008, Cairo, Egypt

## **Generative VR and the Representation of Traditional Architectural Elements**

Second International Conference of Architecture and Urban Planning Departments  
Faculty of Engineering, Ain Shams University ARUP 2008  
25-27 October 2008, Cairo, Egypt

## **Cosmology as a Source of Sustainable Design Ideologies**

First International Conference on Sustainability and the Future  
Future Intermediate Cities: A message to Future Generations – FISC 2010  
Egypt - BUE - The British University in Egypt  
23-25 November 2010, Cairo, Egypt

## **Model-based User Interface Design for The Encyclopedia of Islamic Architecture**

4<sup>th</sup> International Conference on Cultural Heritage, EuroMed 2012  
October 29<sup>th</sup> – November 3<sup>rd</sup> 2012, Limassol, Cyprus

[http://link.springer.com/chapter/10.1007%2F978-3-642-34234-9\\_27](http://link.springer.com/chapter/10.1007%2F978-3-642-34234-9_27)

## **Knowledge Cube**

Architectural Heritage as a Source of Inspiration for Generative Design  
DigitalHeritage2013, October 10, -November 02, 2013, Marseille, France

<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6743817>

## **The Sustainable Cybernetics of Formal Language in Islamic Cities**

Sustainable City 2013, Organized by WIT; Wessex Institute of Technology, Southampton, UK,  
3-5 December 2013, Putrajaya, Malaysia

<http://library.witpress.com/pages/PaperInfo.asp?PaperID=25295>

## **GAs and Evolutionary Design in Architectural Heritage-The Case of Islamic Architecture**

5<sup>th</sup> International Conference on Cultural Heritage, EuroMed 2014  
November 3<sup>rd</sup> – November 8<sup>th</sup> 2014, Limassol, Cyprus

[http://link.springer.com/chapter/10.1007/978-3-319-13695-0\\_50](http://link.springer.com/chapter/10.1007/978-3-319-13695-0_50)

### **Architecture, Music and Pattern Recognition- The Case of Andalusian Architecture**

3rd International Conference on Advances in Engineering & Technology (ICAET)

26-27 December, 2014, Kuala Lumpur, Malaysia

<http://www.ijtra.com/special-issue-view.php?paper=architecture-music-and-pattern-recognition-the-case-of-andalusian-architecture.pdf>

### **The Role of IT in Cultural Heritage – Keynote Speech**

3rd International Conference on Civil and Architecture Engineering (ICCAE'15), 3-4 Jan 2015,

Kuala Lumpur - Malaysia

### **Boosting Creativity Skills & Innovation in Architectural Design Process Using Multimedia**

3rd International Conference on Civil and Architecture Engineering (ICCAE'15), 3-4 Jan 2015,

Kuala Lumpur – Malaysia

<http://www.isaet.org/images/extramages/P115293.pdf>

### **Origins of Geometric Computational Design in Architecture**

International Conference on Engineering, Technology and Computer Science, ICETCS 2016, Feb. 7-8, 2016, Kuala Lumpur, Malaysia

[http://www.google.com/eg/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjIj6uz8r\\_LAhVHuxQKHQlfBesQFggdMAA&url=http%3A%2F%2Fijireweb.com%2Fwp-content%2Fuploads%2F2016%2F02%2Fchapter-2-osama-elrawipd.pdf&usq=AFQjCNG7hskLI0s67Jutj5Rm5xjs7R9TEQ&sig2=J0Z391EvfoFDWWB3Xgw4cw](http://www.google.com/eg/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjIj6uz8r_LAhVHuxQKHQlfBesQFggdMAA&url=http%3A%2F%2Fijireweb.com%2Fwp-content%2Fuploads%2F2016%2F02%2Fchapter-2-osama-elrawipd.pdf&usq=AFQjCNG7hskLI0s67Jutj5Rm5xjs7R9TEQ&sig2=J0Z391EvfoFDWWB3Xgw4cw)

### **The Sustainable Sensed Principles of Islamic Landscape Architecture**

International Conference on Engineering, Technology and Computer Science, ICETCS 2016, Feb. 7-8, 2016, Cairo, Egypt

### **The Use of Mixed-Realities Techniques for the Representation of Islamic Cultural Heritage**

2017 International Conference on Graphics, Images and Interactive Techniques, CGIIT 2017, Feb. 17-19, 2017 Singapore

## **Publications**

The Language of Design in Islamic Architecture (*under publication*)

## **Languages**

- Arabic – native language
- English – speak fluently and read/write with high proficiency

## **Memberships & Cooperation's**

Egyptian Society of Architects

Member of Egyptian Exporters Association – EXPOLINK –  
[WWW.expolink.org.eg](http://WWW.expolink.org.eg) {Dar Alandalus}

Member of INDUSTRIAL MODERNISATION CENTER  
[WWW.imc-egypt.org](http://WWW.imc-egypt.org) {Dar Alandalus}

## Projects (examples)

**UIA International competition for Bibliotheca Alexandrina: Alexandria: 1989**

**ALARKAM ISLAMIC CENTER. CAIRO, EGYPT. 1994**

**ALOROBA PALACE, CAIRO 1998, 99**

Acrylic Handrail, entrance doors and partitions, outdoor colored acrylic roofs for swimming pool area.

**MIRETTE HOTEL HURGADA, ARE. 2000**

Complete designs and interior contracts including acrylic handrails, sky light, and display stands.

**QATAR EMBASSY in New Delhi-Interiors. INDIA 2001.**

**QATAR EMBASSY in Islam Abad- Interiors. PAKISTAN 2001.**

**NABQ HOTELS, SHARM EL SHEKH, 2002**

Acrylic and steel handrails for all three hotels interiors and exterior bridges.

**Alawqaf Conventional Center.2003.**

**Golden Pyramids Plaza, CITY STARS, CAIRO, 2003- 04**

Acrylic handrails for interior food court. Colored acrylic for fun area decorations including claddings.

**AL AZHAR ROAD TUNNELS PROJECT –CAMPENON BERNARD SGE- Subcontractor. CAIRO, EGYPT. 2001**

**MIDDLE EAST NEWS AGENCY, CAIRO 2003**

Acrylic stands and displays for the museum of telecommunications (fixed, mobile, and rotating acrylic displays).

**MANUSPALITY OF AL-QASIM. Kingdom of Saudi Arabia. 2007**

**GSO- Gulf Standardization Organization Main Building in Riyadh. Kingdom of Saudi Arabia. GCC 2007.**

**ZAHRAT ALMAMORA RESIDENCE, ALEXANDERIA. ARE 2009**

**ALLERGY and IMMUNOLOGY CENTER, FACULTY OF MEDICINE, ALAZHAR UNIVERSIT, 2012**

# On-going research project

## Encyclopedia of Islamic Architecture





## Preface

Encyclopedia of Islamic Architecture –**EIA** – is a new approach for Islamic architectural documentation in the digital era. The concept for **EIA** rose from the extreme importance of having a deeper comprehensive understanding to Islamic architecture with a coherent analytic methodology in dealing with this historical heritage, which is one of the most important elements in human history and civilization.

## Vision

Expand the traditional information analysis functions such as search and retrieval, filtering, document summarization, and data presentation methods to address the need of the users through customization of knowledge visualization management systems. Through this customization we can provide for Islamic architecture a foundation for future research information design activities, generating cognitive design concepts and prototyping and evaluating shared info-aesthetics concepts.

## Publishing (Digital Publishing)

**EIA** will be an online encyclopedia that is constantly revised, making the cumbersome and expensive purchase of annual additions and new editions obsolete.

**EIA** will be a **web-based** encyclopedia that takes advantage of more recent technologies, such as *HTML5*, for facilitating better authoring, indexing and hyper linking.

The hyperlinks pointing from one EIA article to another will be treated as directed links while the articles represent the nodes of the network.

