# Arab Academy for Science, Technology & Maritime Transport **Architectural Engineering & Environmental Design Dept.**

College of Engineering and Technology





Amr Ali Mahmoud Bayoumi

Lecturer of Architecture & Environmental design PhD, MSc, BSc, RIBA Associate member, Architect

## Summary Statement

Amr Bayoumi Bsc Msc PhD is associate member of the Royal Institute of British Architects (RIBA). I am a lecturer of Architecture and Environmental Design at the Architectural Engineering and Environmental Design Department. Being the Course Coordinator of Computer-Aided Design at Architecture Department in Port Said Branch. I have an extensive experience in teaching Architecture Design, Building Information Modeling (BIM), History and Theories of Architecture, Environmental design and Environmental Behavior courses.

Amr accumulated a wide range of skills in architectural design through various projects in Egypt, Bahrain, Kuwait, Qatar and Saudi Arabia. Amr is one of the founders of Noon-Ark group since 2008 containing engineering team and research team; extended an experience of designing socio-environmental multi-scale International projects.

Amr is academically interested in research work concerning environmental design and socio-behavioral trends such as simulation concepts of natural forces and agent simulation of human behavior in different contexts. He is familiar with wind, thermal and pollution simulation and tracing methods. Also, he is familiar with space syntax and agent simulation methods.

## **DATES**

## **EDUCATION**

2013-2017

### PHD -DOCTOR OF PHILOSOPHY IN ARCHITECTURE

Department of Architecture - Faculty of Engineering - Alexandria University

Thesis Title: "Multi-scale Retrofitting Model of Courtyard and Atrium: For Maintaining Thermal and Daylight Performance in Existing Building in Alexandria University"

2008-2011

#### RIBA PART [II]

#### MSC IN ARCHITECTURE & ENVIRONMENTAL DESIGN

Architectural Engineering & Environmental Design Dept. -Arab Academy for Science, Technology & Maritime Transport (AASTMT), Alexandria, Egypt.

Thesis Title: "Application of Multi-scale Computational Fluid Dynamics (CFD) in Architecture – Case Study: Qarun Lake, El Fayoum, Egypt"

2003-2007

#### RIPA PART [I]

#### BSC IN ARCHITECTURE & ENVIRONMENTAL DESIGN

Architectural Engineering & Environmental Design Dept. -Arab Academy for Science, Technology & Maritime Transport (AASTMT), Alexandria, Egypt.

Grade: Excellent & Highest GPA in 2007 (GPA: 3.88/4.00)

Graduation Project Title: "Living Bridge in Eastern Harbor, Alexandria"

Graduation Project Grade: 95% highest grade in 2007

2000-2003

High School: Victoria College, Alexandria, Egypt







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## **ACADEMIC EXPERIENCES**

## Academic Courses Teaching Experience (17 courses):

- Arch. Design 1 (Functional relations)
- Arch. Design 2 (Site constraints)
- Arch. Design 3 (Design & Structure)
- Arch. Design 4 (Environmental & Social Design)
- Arch. Design 5 (Design Philosophy)
- Graduation Project
- Environmental Studies 1
- History of Architecture 1
- Visual Studies 1
- Architecture Design and Urban Landscape
- Computer Application in Architecture 1
- Landscape Architecture
- Vernacular Architecture
- Social Dimensions in Urban Design
- Theories of Architecture 3
- Digital Architecture
- Environment and Behavior: Applications in Architecture and Urban Design (Post Graduate Course)

## Academic Workshops:

### 2023

Attended of Negotiation Skills and Influence Others workshop (9-10 August 2023) Leadership Development Center

Arab Academy for Science, Technology and Maritime Transport

Attended of Applications of Artificial Intelligence in Architecture (Level 1) workshop (27-28 August 2023)

Leadership Development Center

Arab Academy for Science, Technology and Maritime Transport

Attended of Applications of Artificial Intelligence in Architecture (Level 2) workshop (24-26 Septemper 2023)

Leadership Development Center

Arab Academy for Science, Technology and Maritime Transport

Attended of Emotional Intelligence in Education workshop (9-10 August 2023)

Leadership Development Center

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2022	Attended of Critical Thinking in Education workshop (23-24 October 2022) Leadership Development Center Arab Academy for Science, Technology and Maritime Transport
2021	Attended of Quality Standards in Education workshop (28-29 July 2021) Leadership Development Center Arab Academy for Science, Technology and Maritime Transport
2020	Attended of Methodologies of Scientific Research workshop (15-16 February 2020) Leadership Development Center Arab Academy for Science, Technology and Maritime Transport
	Attended of Use of Moodle in Education workshop (6-7 July 2020) Leadership Development Center Arab Academy for Science, Technology and Maritime Transport
2019	Attended of Competing for Research Funds (30-31 Dec 2019) Leadership Development Center Arab Academy for Science, Technology and Maritime Transport
	Instructor of workshop in Space Syntax and Social Observation methods (7 April) Practical workshop for using Space Syntax & observation techniques for applying it to urban design project in Port-Said. The workshop is held in AASTMT- Port-Said branch.
2018	Instructor of workshop in Environmental Digital Simulation. Practical workshop for using digital simulation tools & techniques for applying it to design of museum project. The workshop is held in AASTMT- Port-Said branch.
2016	Instructor of workshop entitled "Digital Simulation of Morphological Digital Concepts 2" a Practical and theoretical design techniques workshop to show generative design techniques and digital environmental simulation approaches within the context of Post-modern and environmental design philosophies in Cairo.
2015	Instructor of workshop entitled "Digital Simulation of Morphological Digital Concepts 1" a Practical and theoretical design techniques workshop to show generative design techniques and digital environmental simulation approaches within the context of Post-modern and environmental design philosophies in Alexandria.
2014	Participate in "Practical Seminar on Advanced Architecture" organized by IAAC (Institute for Advanced Architecture of Catalonia, Barcelona, Spain).
2013	Participate in "Zero Carbon Buildings in Alexandria University". Tracing $\mathrm{CO}_2$ , pollution particles inside educational buildings and in external open spaces.

## **PUBLICATIONS**

## 2023

Bayoumi A., Bayoumi O., "Investigating the Socio-Economic Dimensions of Shopping Open Spaces before and after COVID-19 Case Study: Green Plaza Mall, Alexandria, Egypt" Current Urban Studies Journal, ISSN Online: 2328-4919, Scientific Research Publishing, Nov. 2023.

Bayoumi A., Naselli F., Sharaf Eldin S., "A Conceptual Framework for Improving Urban Image in Two Similar Mediterranean Cities" 6<sup>th</sup> International Conference of Contemporary Affairs in Architecture and Urbanism (Alanya University, Turkey, 16<sup>th</sup> June 2023)

Abu Elkhair K., Nagy Sarhan A., Bayoumi A., "Enhancing Social Qualities in University Campus Outdoor Spaces through Islamic Spatial Configurations: The Case of the American University in Cairo" Buildings, 13(5):1179-1179. doi: 10.3390/buildings13051179.

Bayoumi A., Sharaf Eldin, S., Elwan, M.M., "Social retrofitting design through occupancy pattern in Tanta University, Egypt" Ain Shams Engineering Journal, Vol 14(3), 101911, 2023.

2021

Sharaf Eldin S., Elwan M., Bayoumi A., "Retrofitting Campus Outdoor Space Based on Thermal Performance- Case Study: Seberbay University Campus at Tanta University." Civil Engineering and Architecture Journal, 9(7), pp. 2505–2516, 20-21 May 2021.

Bayoumi O., Bayoumi A., Sharaf Eldin S., "Discovering Post-Covid Social Indicators for Bibliotheca of Alexandria, Egypt" 4th International Conference on Architecture and Urban Design (ICAUD) (Epoka University, Tirana, Albania, 2021).

2019

Bayoumi O., Abdellal M., Fekry M., Bayoumi A., "Developing an Ecological Assessment Tool for Siwan Eco-lodges in the Egyptian Western Desert (EWD)". Sustainable City XIII Conference, WIT Transactions on Ecology and the Environment, Vol. 238, WIT press, OSSN 1743-3541, 2019.

## Architectural Engineering & Environmental Design Dept.

2017

Bayoumi A., Soliman A.M., Farghaly, T., El Sayad Z., "Environmental Retrofitting: Thermal Evaluation of Three Light Structure Design Scenarios for Transitional Space in Alexandria University, Egypt." IASTEM International Conference (Bangkok, Thailand, 11th August 2017).

Bayoumi A., Farghaly, T., El Sayad Z., "Towards Environmental Retrofitting of Egyptian Transitional Spaces: Courtyard Building in Alexandria University, Egypt." International Journal of New Technology & Research (IJNTR). ISSN: 2454, Vol. 3, Issue-2, February 24-29, 2017.

2015

Bayoumi A., Gabr M., Abdel Galil R., "Restoring Eco-Responsive Learning Spaces; A Holistic, Multi-Level Analysis Towards Courtyard Integrated Environment at Alexandria University, Egypt (Poster Presentation). "6th World Conf. On Ecological Restoration, Towards Resilient Ecosystems; Restoring the Urban, the Rural and the Wild (SER 2015), Manchester Metropolitan University, Manchester, UK, Aug. 23-27, 2015.

2014

Gabr M., Bayoumi A., "An Inventive Approach Towards Sustainable Transport Planning in Developing Countries; A Vision for Green Transport Corridor in Alexandria, Egypt." Proceedings of Culture Of Liberty In Visual Arts and Architecture, The 4th Scientific International Conference, Alexandria, Egypt, June 3-5, 2014.

Bayoumi A., Gabr M., "Effect of High-Rise Modern Buildings on the Thermal Performance of Traditional Urban Fabric, Simulation Study in Al-Manshiya Neighbor, Alexandria, Egypt." Proceedings of Culture of Liberty in Visual Arts And Architecture, The 4th Scientific International Conference, Alexandria, Egypt, June 3-5, 2014.

2013

Bayoumi A., "Comparative Wind Simulation Study of Different Urban Patterns in Hot Arid Region: Touristic Resort at Qarun Lake, Fayoum Region, Egypt." CRDCSC, Energy Science and Technology Journal, Vol.5, No.1, pp.1-7, Canada, 2013.

### THESIS SUPERVISION

2024 (Supervisor) Finished 21/01/2024

## Spatial Configuration in Enhancing Social Qualities of University Campus Outdoor Spaces: The Case Study of the American University in New Cairo

Researcher: Kamel Ibrahim Abu El Kheir

Supervision Committee: A. Prof. Alaa Eldin Sarhan and Dr Amr

Ali Bayoumi

Examination Committee: A. Prof. Nabil Mohareb and A. Prof.

Mai Abas Yehia

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### PROFESSIONAL EXPERIENCES

#### 2008-2016

Associate of Noon-Ark Design Group, Alexandria. (Architecture group works in Middle East and Canada)

#### 2007-2008

Architect in Shalalat Architecture Group in Alexandria, Egypt.

#### 2006-2007

Junior Architect in Dr Ahmed Helmi Association in Egypt and Kuwait.

#### 2005-2006

Junior Architect in Dr Ragheb Architecture Office in Alexandria Egypt.

#### 2000-2005

Worked on a number of passive residential houses in Borg El Arab, Egypt. Gaining experience of designing and executing traditional buildings in desert communities.

## **Selected Projects**

-Architecture, Interior and landscape design of Villas and Chalets in North-coast, Egypt

2021-2022

Curriculum Vitae
Dr Amr Ali M. Bayoumi

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	-Interior design of House in Gleem, Alexandria, Egypt (Construction finished in 2022)
2019-2020	- Interior design of number of Chalets in North-coast, Egypt.
2017-2018	<ul> <li>Second Prize of Minaret Architecture Design, Bunyan Competition,</li> <li>Qatar.</li> <li>Best design of Green Pyramid Mosque, BUE competition, Cairo,</li> <li>Egypt.</li> </ul>
	-House design retrofitting in Borg El Arab, Egypt.
2016-2017	-Passive design of Mosque in Borg El Arab, EgyptMehwar Highland (Luxury residential and recreational complex) -
2015-2016	<ul> <li>(7500m²) in Alexandria, Egypt.</li> <li>Montaza-recreational project (hotel and restaurants) in Alexandria, Egypt.</li> <li>Al Jubail desalination square landscape, large art sculptures (750,000m²) in Al Jubail city, Saudi Arabia.</li> </ul>
2013-2014	<ul> <li>-Mashtal El Badawy Nile multi-functional recreational project, Cairo, Egypt.</li> <li>- Mansour House (800m²) in Borg El Arab, Egypt.</li> </ul>
2011-2012	-Design of villa Eslam Abdel Motaleb (650 m²), Borg El Arab, Egypt.
	-Second prize, Naama bay gate competition, Sharm El Sheikh, Egypt.
2009-2010	-Design of Sun desert hotel, Cairo-Alexandria desert road, Egypt.
	-Design of "Bahrain Land" as multi-function project consists of hotel, mall and theme park in Al-Muharaq, Bahrain.
2007-2008	Undergraduate Selected Projects -Participate with Experienced Architecture Consultant house in "Eastern
2005-2006	-Harbor development" International competition organized by Bibliotheca Alexandrina, 2006.

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-Nominated for the RIBA President's medals students award by undergraduate hospital project, 2005.

## RESEARCH INTEREST

- Environmental and ecological studies
- History of Architecture and Civilizations.
- Architecture Design pedagogy.
- Architecture philosophy and criticism

### READING INTEREST

- Real Estate Investing and capital cycles.
- History of civilizations (social and economic patterns)
- Eastern and Western philosophies.