

YOMNA ELGHAZI

Lecturer – AASTMT, Cairo, Egypt

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EDUCATION

- 2016- 2021** **Newcastle University, School of Architecture, Planning & Landscape.**
PhD in Architecture, Planning and Landscape
Thesis Topic: Integrated Design Approach For Responsive Solar Shadings In DSF In Hot Arid Climate
Under the Supervision of Dr. Neveen Hamza & Dr. Martyn Dade-Robertson
- Interdisciplinary approach between Performance-based & Craft-based decision making
 - Carried CFD modelling and simulations for double skin facades using Ansys fluent
 - Gained Qualitative and numerical research experience
 - Developed Craft-based design experimentation of Smart materials and shape memory alloys
 - Explored origami and biomimicry principles as kinetics form generators
- 2016-2017** **Newcastle University, School of Architecture, Planning & Landscape**
Postgraduate Certificate in Research Training for Humanities and social science (HaSs Research Training)
- 2011-2013** **American University in Cairo (AUC)**
Professional diploma in Project management (PRMG)
GPA: 3.35/4
- 2005-2009** **Cairo University, Faculty of Engineering, Department of Architecture.**
Master of Science in Architecture Studies (M.Sc.)
Major: Architecture Studies, Minor: Urban Societies
Thesis: Building Skins in the Age of Information Technology
Under the Supervision of Prof. Ali Gabr & Dr. Tarek Abd-elraouf
- 1999-2004** **Ain Shams University - Cairo**
B.Sc. in Architectural Engineering
Graduation Grade: Very Good 80% with Honor
Project Grade: Excellent

WORK EXPERIENCE

Teaching Experience

- 2004-2016** **Arab Academy for Science and Technology & Maritime Transport, Architectural Department**
Full-time assistant lecturer
- Tasks included giving assistance to students in Studios, guiding learning, prompting ideas, questioning understanding, and stimulating thinking.
 - Experienced at delivering teaching and training to both small and large undergraduate groups

- Led an Active learning process in class based on one to one feedback as well as group discussions.
- Assessed submissions and exams following an RIBA approved clear marking criteria.
- Managed a design studio/class of 20-30 students and 3 teacher assistants as part of my responsibility as a lecturer
- Worked in cooperation with course supervisor and teacher assistants to manage the workload and assessments.
- Conducted one to one sessions with undergraduate students with educational difficulties as an academic adviser and put graduation plans to help them graduate and move on with their practical life.
- Developed strong communication skills, both verbal and written, throughout my academic career.

2013-2014

The American University in Cairo (AUC), Architectural Department

Part-time Assistant lecturer, AENG 454 - Architectural Design Studio IV - Studio on the Art of Structure and Technology. The studio's objective is to design based on the understanding of structural systems.

Practical Experience

2011-2013

Saudi DIYAR Cairo Branch

Project Architect Producing Construction drawings and Shop drawings

- Made contribution to several projects: Saudi Railway Station, Riyadh Hilton Hotel and many others

2010-2011

WESSAM consulting group

Architect and Design Team Leader, Producing Architectural Design scheme proposals, design development, interior & urban design proposals

- Made contribution to several projects: Residential Villas & Buildings, Residential Compounds, Office Buildings & various Public Buildings (Palm View Compound, Pyramisa Gardens, Sowani Resort, and many others)

2005-2010

SPINE engineering and architecture

Architect and Team Leader Producing Architectural Design scheme proposals, working drawings, interior & urban design proposals

- Made contribution to several projects: Residential Villas & Buildings, Residential Compounds, Office Buildings, Hospitals, Shopping malls & various Public Buildings
- Led, managed and coordinated many design projects among a team of architects, promoting communications between all team members, and holding coordination meetings throughout the design process.
- Developed the ability to work under pressure and under demanding conditions.

Additional work experience

Apr. 2018- June 2018

Newcastle University JobsOC

Postgraduate Assessor for career service as paid work within the University, The job included marking for the ncl+ Award and assessing interviews for career service modules

- Demonstrated adaptability, flexibility, communication skills and undertook tasks quickly and efficiently due to the temporary nature of the roles.

KEY SKILLS

Computer skills	Proficient in Microsoft Office, including Word, PowerPoint and Excel Proficient in Adobe Photoshop, AutoCAD (2d, 3d), Google SketchUp Parametric Modelling (Rhino & Grasshopper)
General skills	Photography, Freehand Sketching and Physical modelling
Languages	Fluent in written and spoken Arabic and English

SCHOLARSHIPS & AWARDS

2018-2020	Faculty for the Future Fellowship program for talented women scientists (2018-2020) Sponsored by: Schlumberger Foundation
2016- 2019	Newcastle University Overseas Research Scholarship (NUORS) award for international students applying to commence PhD (2016-2019) Sponsored by: Newcastle University
2001-2003	Letters of Excellence on Design and Execution Drawing courses from Ain Shams University

Publication

Journal Publication

2016	Mahmoud, A. H. A., & Elghazi, Y. (2016). Parametric-based designs for kinetic facades to optimize daylight performance: Comparing rotation and translation kinetic motion for hexagonal facade patterns. <i>Solar Energy</i> , 126, 111-127.
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Peer Reviewed Conference Proceedings

2009	ElGhazi, Y. (2009). <i>BUILDING SKINS IN THE AGE OF INFORMATION TECHNOLOGY</i> (Doctoral dissertation, Faculty of Engineering at Cairo University In Partial Fulfilment of the Requirements for the Degree of Master of Science In Architectural Engineering Faculty Of Engineering, Cairo University Giza).
2014	ElGhazi, Y. , Wagdy, A., Mohamed, S., & Hassan, A. (2014). Daylighting driven design: optimizing kaleidocycle facade for hot arid climate. <i>BauSIM, Aachen, Germany</i> .
2015	Wagdy, A., Elghazi, Y. , Abdalwahab, S., & Hassan, A. (2015). The Balance between Daylighting and Thermal Performance Based on Exploiting the Kaleidocycle Typology in Hot Arid Climate of Aswan, Egypt. In <i>AEI 2015</i> (pp. 300-315).
2015	Elghazi, Y. , Wagdy, A., & Abdalwahab, S. (2015). Simulation driven design for kinetic system; optimize kaledocycle facade configuration for daylighting adequacy in hot arid climates. In <i>Conference of International Building Performance Simulation Association</i> (pp. 182-189).
2016	Mahmoud, A. H. A., & Elghazi, Y. (2016) Origami Explorations - A Generative Parametric Technique For kinetic cellular façade to optimize Daylight Performance,

- Proceedings of the 34th eCAADe Conference - Volume 2, University of Oulu, Oulu, Finland, 22-26 August 2016, pp. 399-408
- 2016 Abdelwahab, S., & **Elghazi, Y.** (2016) A generative performance-based design for low-cost brickwork screens. In *Building Simulation & Optimisation 2016, Third IBSPA -, Newcastle, England Conference*,
- 2017 **Elghazi, Y.**, Hamza, N. & Dade-Robertson, M. (2017). Responsive Plant-inspired skins: A review. In *Conference on Passive and Low Energy Architecture*, Edinburgh, United Kingdom.
- 2017 Tarabieh K., Abdelmohsen S., **Elghazi Y.**, El-Dabaa R., Hassan A. & Amer M. (2017) Parametric Investigation of Three Types of Brick Bonds for Thermal Performance in a Hot Arid Climate Zone In *Conference on Passive and Low Energy Architecture*, Edinburgh, United Kingdom.
- 2018 Elghazi, Y., Hamza, N. & Dade-Robertson, M. (2018), Modelling and Simulation of Integrated Responsive Solar-Shading with Double Skin Facades in Hot Arid Climates. In *Building Simulation & Optimisation 2018, IBSPA, Cambridge, United Kingdom*.
- 2018 Tarabieh K., Abdelmohsen S., Hassan A. , El-Dabaa R. & Elghazi Y. (2018), Parametric Investigation of Brick Extrusion Patterns using Thermal Simulation. In *Building Simulation & Optimisation 2018, IBSPA, Cambridge, United Kingdom*.
- 2019 Tarabieh K., Abdelmohsen S., Hassan A. , El-Dabaa R. & Elghazi Y. (2019), Parametric Investigation of Brick Extrusion Patterns using Thermal Simulation. In *Building Simulation & Optimisation 2019, IBSPA, Rome, Italy, 2–4 September*. (Submitted)
- 2021 Elghazi, Y., Hamza, N. & Dade-Robertson, M. (2021), Comparative thermal performance analysis of a shaded and non-shaded Double Skin Façade in hot arid areas. In *Building Simulation & Optimisation 2019, IBSPA, Rome, Italy, 2–4 September*