# SHERIF M ABDELMOHSEN, PhD, Assoc. AIA

ASSOCIATE PROFESSOR OF DIGITAL MEDIA & DESIGN COMPUTING IN ARCHITECTURE Department of Architecture, The American University in Cairo (AUC), Cairo, Egypt CO-FOUNDER & MANAGING PARTNER, UDAAR

# Email: <u>sherifmorad@aucegypt.edu</u> URL: <u>http://www.aucegypt.edu/fac/sherifabdelmohsen</u>

EDUCATION	PhD in Architecture (2011) School of Architecture, Georgia Institute of Technology, Atlanta, GA, USA PhD Thesis: An Ethnographically Informed Analysis of Design Intent Communication in BIM-Enabled Architectural Practice Recipient of Faculty Award of Merit for Best Doctoral Presentation (2010/2011)
	MSc in Architecture (2004) Department of Architecture, Ain Shams University, Cairo, Egypt MSc Thesis: Towards a Conceptual Framework for Implementing Intelligent Mixed Reality in Architectural Education
DOCITION	<u>BSc in Architecture (2000) (Honors)</u> Department of Architecture, Ain Shams University, Cairo, Egypt BSc Graduation Project: Touristic Cultural Complex at Cairo Northern Wall
POSITION	<u>Associate Professor (01/2017 – Present)</u> Associate Professor of Digital Media and Design Computing in Architecture Department of Architecture, American University in Cairo (AUC), Egypt
	April 2017 – Present <u>UDAAR for Engineering Consultancy and Technology Solutions</u> Co-Founder, Director of Research and Development
	August 2014 – December 2016 Department of Architecture, American University in Cairo (AUC), Egypt Assistant Professor of Digital Media and Design Computing in Architecture
	September 2015 – September 2016 <u>UNii Engineering Consultancy, Abu Dhabi, United Arab Emirates</u> R&D Developer and Team Leader, UNii Cairo
	August 2012 - May 2014Department of Construction and Architectural Engineering, AmericanUniversity in Cairo (AUC), Cairo, EgyptAdjunct Faculty
	June 2013 – January 2015 <u>KRAFT   Studio (Studio for Kinematic, Robotic, Architectronic and Fabrication</u> <u>Technologies), Cairo, Egypt</u> Founder and Director
	January 2013 - September 2014 <u>FEDA CORELAB (Faculty of Engineering Department of Architecture,</u> <u>Consultancy for Research Laboratory), Ain Shams University, Cairo, Egypt</u> Research Manager
	September 2012 – January 2013 Arab Academy for Science and Technology, Cairo, Egypt Part time lecturer
	September 2011 – January 2012 Department of Architecture, British University in Egypt (BUE), Cairo, Egypt Part time lecturer

September 2011 – January 2013, October 2014 – Present Department of Architecture, Future University in Egypt (FUE), Cairo, Egypt Part time lecturer

September 2011 – Present <u>Department of Architecture, Ain Shams University, Cairo, Egypt</u> Assistant Professor (09/2011 – 11/2016), Associate Professor (11/2016 – Present)

August 2010 - May 2011 School of Architecture, Georgia Institute of Technology, Atlanta, GA, USA Teaching Assistant, Common First Year

June 2007 - September 2010 <u>AEC Integration Laboratory (Prof. Charles Eastman), Atlanta, GA, USA</u> Researcher and Member of Georgia Tech Design Computing team

July 2004 – September 2004 <u>Consultant Office (Cube Consultants), Cairo, Egypt</u> Architect

March 2004 – January 2005 <u>Consultant Office (Prof. Yasser Mansour), Cairo, Egypt</u> Architect

January 2004 – April 2004 <u>Consultant Office (Maged Fahmy, Emad Aziz), Cairo, Egypt</u> Architect

October 2003 – May 2005, September 2012 - Present <u>Arab Academy for Science and Technology, Cairo, Egypt</u> Teaching Assistant, Part time lecturer (Instructor to student ratio 1: 7)

March 2001 – May 2001 <u>YAT Computer Center, Cairo, Egypt</u> AutoCAD Instructor (Instructor to student ratio 1: 4)

October 2000 - August 2005 <u>Department of Architecture, Ain Shams University, Cairo, Egypt</u> Teaching Assistant, Assistant Lecturer (Instructor to student ratio 1: 40)

August 2000 – October 2000 <u>Center for Developing Historic Cairo, Citadel, Cairo, Egypt</u> Architect

July 1998 – September 1998 <u>Al-Shehab Computer Center, Cairo, Egypt</u> AutoCAD Instructor

October 1996 – August 2005 Consultant Office (Prof. Dr. Morad Abdelkader) Architect

#### **COMPUTER SKILLS**

**CAD and Visualization** AutoCAD, SketchUp, 3DStudioMAX, Adobe Photoshop

**Generative design and digital fabrication** Rhino, Grasshopper

**Building Information Modeling** Autodesk Revit, Digital Project, Solibri Model Checker

**Programming** Python, Processing, Java

# **TEACHING EXPERIENCE**

AS ASSOCIATE PR	OFESSO
-----------------	--------

(2017 – Present)

# Department of Architecture, American University in Cairo (AUC), Egypt

ARCH 473/3522 Digital Design Studio and Workshop ARCH 455/4558 Architectural Design Studio VIII (High Tech) ARCH 490/4980 Senior Project I ARCH 491/4981 Senior Project II FEPD 003 Façade Sustainable Design: Parametric Design for Natural Ventilation FEPD 004 Façade Production: Fire Protection in Building Façades

# Department of Architecture, Ain Shams University, Cairo, Egypt

ARC 221 Theories of Architecture (2) ARC 616 Interactive and Responsive Architecture

#### AS ASSISTANT PROFESSOR

(2011 – 2016)

# Department of Architecture, Ain Shams University, Cairo, Egypt

ARC 212 Architectural Design (2) ARC 221 Theories of Architecture (2) ARC 341 Computer Applications in Architecture (2) ARC 351 Working Drawings (1) ARC 451 Working Drawings (2) ARC 504 Computer Applications in Architecture ARC 616 Interactive and Responsive Architecture

# Department of Architecture, American University in Cairo (AUC), Egypt

ARCH 473/3522 Digital Design Studio and Workshop ARCH 455/4558 Architectural Design Studio VIII (High Tech) ARCH 456/4557 Architectural Design Studio VI (Contextual Design) ARCH 491/4981 Senior Project II (*as advisor and course coordinator*) ARCH 273/1521 Digital Representation Tools for Architects (*as coordinator*)

# Department of Architecture, Future University in Egypt (FUE), Cairo, Egypt

UNV E09 Specific Computer Applications ARC 231 Graphics and Visual Skills (2) ARC 322 History and Theories (4) ARC E10 Advanced Computer Applications in Architecture

# Department of Architecture, British University in Egypt (BUE), Cairo, Egypt

Architectural Design (4) Working Drawings (2)

# Department of Architecture, Arab Academy for Science and Technology and Maritime Transport (AASTMT), Cairo, Egypt

AR 428 Computer Applications in Architecture AR 414 Architectural Design (4)

AS TEACHING ASSISTANT (2000 – 2011)

# School of Architecture, Georgia Institute of Technology, USA

COA 1012 Fundamentals – Design and the Built Environment II COA 1060 Introduction - Design and the Built Environment

# Department of Architecture, Arab Academy for Science and Technology and Maritime Transport, Cairo (AASTMT), Egypt

AR 414 Architectural Design IV Building Construction I

# Department of Architecture, Ain Shams University, Cairo, Egypt

ARC 111 Building Construction (1) ARC 150 Free Hand Drawing ARC 151 Visual Design ARC 161 Sciagraphy and Perspective ARC 202 Architectural Design (2) ARC 241 Computer Applications (1) ARC 271 Computers in Architecture ARC 311 Architectural Design (3) ARC 351 Working Drawings (1) ARC 499 Graduation Project

# **RESEARCH PROFILE**

#### Web of Science Researcher ID: AAI-2131-2019

ORCID ID: 0000-0002-3580-3749

Number of publications (as of JUNE 2020): 15 (Web of Science) / 16 (Scopus) / 58 (Google Scholar)

Number of citations (as of JUNE 2020): 87 (Web of Science) / 162 (Scopus) / 406 (Google Scholar)

h-index (as of JUNE 2020): 3 (Web of Science) / 5 (Scopus) / 8 (Google Scholar)

#### **Publons Profile:**

https://publons.com/researcher/3303113/sherif-abdelmohsen/

Scopus Profile:

https://www.scopus.com/authid/detail.uri?authorId=54890702500

**Google Scholar Profile:** https://scholar.google.com.eg/citations?user=r7AdvwUAAAAJ&hl=en

#### **Research Gate Profile**:

https://www.researchgate.net/profile/Sherif\_Abdelmohsen

#### Academia.edu Profile:

https://aucegypt.academia.edu/SHERIFMORADABDELMOHSEN

# **RESEARCH INTERESTS**

- Building Information Modeling (BIM) and pre-occupancy evaluation
- Space Layout Planning (SLP) and automated building review systems
- Generative, parametric and algorithmic design, and digital fabrication
- Ambient Intelligence, physical computing and tangible interfaces
- Interactive architecture and responsive systems in the built environment
- Shape shifting facade skins using hygroscopic properties of wood
- Smart building management and automated facility management systems
- Sketch understanding, problem solving, and analyzing design activity
- Qualitative methods in design research

# PUBLICATIONS

2020

**Ibrahim, A., Abdelmohsen, S., Zayan, A. and Omar, W. (2020)**, Extending the Passive Actuation of Low-Tech Architectural Adaptive Systems by Integrating Hygroscopic and Thermal Properties of Wood, 38<sup>th</sup> eCAADe International Conference, Berlin, Germany.

Nagy, M., Mansour, Y. and Abdelmohsen, S. (2020), <u>Multi-Objective</u> Optimization Methods as a Decision Making Strategy, International Journal of Engineering Research and Technology (IJERT), Vol. 9, Issue 3, ISSN: 2278-0181.

**El-Dabaa, R. and Abdelmohsen, S. (2020)**, Deriving the Production Rules of Shape-Shifting Grammars for Adaptive Façades: The Case of Hygromorphic Thermo-bimetal Composites (HMTM), accepted for publication in the *Ninth International Conference on Design Computing and Cognition - DCC*'20.

El-Dabaa, R., Abdelmohsen, S. and Mansour, Y. (2020), <u>Programmable Passive</u> Actuation for Adaptive Building Facade Design using Hygroscopic Properties of Wood, Wood Material Science & Engineering, DOI: 10.1080/ 17480272.2020.1713885.

Abdelmohsen, S. and Hassab, A. (2020), <u>A Computational Approach for the</u> <u>Mass Customization of Materially Informed Double Curved Façade Panels</u>, accepted for publication in the 25th International Conference of the Association for *Computer-Aided Architectural Design Research in Asia (CAADRIA)*.

Assem, A., Abdelmohsen, S. and Ezzeldin, M. (2019), <u>Smart Management of</u> <u>the Reconstruction Process of Post-Conflict Cities</u>, In Press, *Archnet-IJAR: International Journal of Architectural Research*, Vol. 14, No. 2, pp. 325-343, <u>https://doi.org/10.1108/ARCH-04-2019-0099</u>.

Abdelmohsen, S., Adriaenssens, S., El-Dabaa, R., Gabriele, S., Olivieri, L. and Teresi, L. (2019), <u>A Multi-Physics Modeling Approach for Modeling Hygroscopic Behavior in Wood Low-Tech Architectural Adaptive Systems, *Computer-Aided Design (CAD)*, Vol. 106, 43-53. DOI: 10.1016/j.cad.2018.07.005.</u>

Abdelmohsen, S., Adriaenssens, S., Gabriele, S., Olivieri, L., El-Dabaa, R. (2019), <u>Hygroscapes: Innovative Shape Shifting Facades</u>, in 'Digital Wood Design: Innovative techniques of representation in Architectural Design', 1st ed. F. Bianconi, M. Filippucci, Springer International Publishing, ISBN 978-3-030-03676-8, DOI: 10.1007/978-3-030-03676-8\_26.

Abdelmohsen, S., Massoud, P., El-Dabaa, R., Ibrahim, A., and Mokbel, T. (2019), <u>The Effect of Hygroscopic Design Parameters on the Programmability of Laminated Wood Composites for Adaptive Façades</u>, in: Lee J.H. (eds) Computer-Aided Architectural Design. "Hello Culture". CAAD Futures 2019. Communications in Computer and Information Science (CCIS), Vol. 1028, Springer, Singapore. Chapter 26, pp. 372-383, DOI:10.1007/978-981-13-8410-3\_26.

**Abdelmohsen, S. and El-Dabaa, R. (2019)**, <u>H<sub>M</sub>T<sub>M</sub>: Hygromorphic-</u> <u>Thermobimetal Composites as a Novel Approach to Enhance Passive Actuation</u> <u>of Adaptive Façades</u>, in proceedings of the *18th CAAD Futures 2019 International Conference*, Daejeon, Korea, pp. 290 – 300.

Abdelmohsen, S., Tarabieh, K., Salem, I., El-Ghazi, Y., El-Dabaa, R. Hassan, A. (2019), <u>Coupling Parametric Design and Robotic Assembly Simulation to</u> <u>Generate Thermally Responsive Brick Walls</u>, in proceedings of the 16<sup>th</sup> IBPSA International Conference (BS 2019), Rome, Italy, p. 3006-3013, https://doi.org/10.26868/25222708.2019.210904.

Abdelmohsen, S., Assem, A. and Ezzeldin, M. (2019), <u>A Fuzzy-Based</u> <u>Approach for Generating Spatial Layout Configurations</u>, in Sousa, JP, Xavier, JP and Castro Henriques, G (eds.), "Architecture in the Age of the 4th Industrial Revolution" - Proceedings of the 37th eCAADe and 23rd SIGraDi Conference -Volume 2, University of Porto, Porto, Portugal, 11-13 September 2019, pp. 35-44.

2019

Hosny, S., Abdelmohsen, S. and Mansour, S. (2019), <u>A Conceptual Framework</u> for Enriching Architectural Classroom with Mobile Augmented Reality, *Journal* of Al-Azhar University Engineering Sector (JAUES), Vol. 14, No. 50, pp. 158-175.

Abdelmohsen, S., Assem, A. and Ezzeldin, M. (2019), <u>School2Share (S2S): A</u> <u>Computational Approach for the Efficient Management of Shared School</u> <u>Facilities in Egypt</u>, in proceedings of *AR-UP 2019: Architecture & Urbanism... A Smart Outlook*, Cairo, Egypt, pp. 24-33, ISBN: 978-977-237-415-1.

**Omar, M., Kamel, S., Abdelmohsen, S., Kamel, D. (2019)**, <u>Biomimetic</u> <u>Approaches in Architectural Design Education</u>, in proceedings of *AR-UP 2019: Architecture & Urbanism... A Smart Outlook*, Cairo, Egypt, pp. 622-631, ISBN: 978-977-237-415-1.

El-Baz, N., Kamel, S., Abdelmohsen, S. (2019), <u>Architectural Heritage between</u> <u>Visualization and H-BIM</u>, in proceedings of *AR-UP 2019: Architecture & Urbanism... A Smart Outlook*, Cairo, Egypt, pp. 44-51, ISBN: 978-977-237-415-1.

El-Baz, N., Kamel, S., Abdelmohsen, S. (2019), <u>H-BIM: Towards a New Era of</u> <u>Interoperability</u>, in proceedings of *AR-UP 2019: Architecture & Urbanism... A Smart Outlook*, Cairo, Egypt, pp. 52-59, ISBN: 978-977-237-415-1.

Abdelmohsen, S. El-Dabaa, R. and Mansour, Y. (2019), Encoding Latent Properties of Hygromorphic-Thermobimetal Composites (HMTM) as a Passive Mechanism for Adaptive Building Skins, in proceedings of *AR-UP 2019: Architecture & Urbanism... A Smart Outlook*, Cairo, Egypt, pp. 70-79, ISBN: 978-977-237-415-1.

Abdelmohsen, S., Assem, A. and Ezzeldin, M. (2018), <u>A Computational</u> <u>Approach for the Smart City Management of the Reconstruction Process in</u> <u>Baghdad</u>, in proceedings of the *International Conference on Post-Terrorist Reconstruction and Heritage Restoration in Iraq and Syria*, Baghdad, Iraq.

Abdelmohsen, S., El-Dabaa, R., Ibrahim, A., Massoud, P. and Mokbel, T. (2018), <u>A Computational Approach for Soft Adaptive Building Skins using Hygromorphic and Thermobimetal Composites</u>, *Proceedings of the International Conference on Cross-Disciplinary Research in Architecture (RCA 2018)*, pp. 64-67, TU Kaiserslautern, Kaiserslautern, Germany.

**Tarabieh, K., Abdelmohsen, S., El-Ghazi, Y., El-Dabaa, R. and Hassan, A.** (2018), <u>Parametric Investigation of Brick Extrusion Pattern using Thermal</u> <u>Simulation</u>, *Proceedings of the* 4<sup>th</sup> *Building Simulation and Optimization Conference* (*BSO* 2018), Cambridge, UK, pp. 597 - 604.

Abdelmohsen, S., Massoud, P., El-Dabaa, R., Ibrahim, A., and Mokbel, T. (2018), <u>A Computational Method for Tracking the Hygroscopic Motion of</u> <u>Wood to develop Adaptive Architectural Skins</u>, *Proceedings of the 36<sup>th</sup> eCAADe International Conference*, Lodz, Poland, Volume 2, pp. 253 – 262.

Abdelmohsen, S. and Eldabaa, R. (2018), <u>A Methodology for Evaluating the</u> <u>Hygroscopic Behavior of Wood in Adaptive Building Skins using Motion</u> <u>Grammar</u>, IOP Conference Series: Materials Science and Engineering **362** (2018) 012011, doi:10.1088/1757-899X/362/1/012011.

El-Halawany, N., El-Daly, H. and Abdelmohsen, S. (2018), <u>A User-centric</u> <u>Approach to optimize Visitors' Experience in Exhibition Spaces using</u> <u>Parametric Spatial Analysis</u>, *Academic Research Community (ARChive)*, Vol. 2, No. 3, pp. 1-10, DOI: http://dx.doi.org/10.21625/archive.v2i3.

2018

Abdelmohsen, S. and Tarabishy, S. (2017), Optimized Design to Robotic Production: Integrating Multipoint Forming and Free Form Material Deposition in the Mass Customization of Double Curved Facades, International Journal of Parallel, Emergent and Distributed Systems (IJPEDS), Vol. 32, 180-189, DOI: 10.1080/17445760.2017.1390097.

Abdelmohsen, S., Massoud, P., Tarabishy, S. and Hassab, A. (2017), <u>Rule-based vs. Intuition-based Generative Design: An Inquiry into the Digital Chain</u> <u>Concept in Undergraduate Architectural Education</u>, *International Journal of Parallel, Emergent and Distributed Systems (IJPEDS)*, Vol. 32, 199-209, DOI: 10.1080/17445760.2017.1390102.

Tarabieh, K., Abdelmohsen, S., El-Ghazi, Y., El-Dabaa, R., Hassan, A. and Amer, M. (2017), <u>Parametric Investigation of Three Types of Brick Bonds for</u> <u>Thermal Performance in a Hot Arid Climate Zone</u>, in Proceedings of *Passive Low Energy Architecture International Conference (PLEA 2017)*, Edinburgh, UK, pp. 3699 - 3706.

**El-Zanfaly, D. and Abdelmohsen, S. (2017)**, <u>Imitation in Action: A Pedagogical Approach for Making Kinetic Structures</u>, in G. Çağdaş, M. Özkar, L.F. Gül and E. Gürer (Eds.): *Future Trajectories of Computation in Design: proceedings of the 17th CAAD Futures 2017 International Conference*, Cenkler Matbaa, Istanbul, Turkey, pp. 533 – 545. ISBN: 978-975-561-482-3.

Abdelmohsen S., Assem A., Tarabishy S., Ibrahim A. (2017), <u>A Heuristic</u> <u>Approach for the Automated Generation of Furniture Layout Schemes in</u> <u>Residential Spaces</u>, In: Gero J. (eds) Design Computing and Cognition '16. Springer, Cham, pp 459-475. DOI: 10.1007/978-3-319-44989-0\_25.

Mansour, Y., Iscandar, M., Abdelmohsen, S. and Yassa, N. (2016), <u>Workplace</u> <u>Creativity between Theory and Practice</u>, *Middle East Journal of Applied Sciences*, Vol. 6, No. 4, 878-883, ISSN 2077-4613.

Yassa, N., Abdelmohsen, S., Mansour, Y. and Iscandar, M. (2016), "This Office makes me more Creative": Creative Class Workers' Experiences in Innovative Office Spaces, BUE International Conference on Sustainable Vital Technologies in Engineering and Informatics (BUE ACE1 SVT2016).

Abdelmohsen, S. and Tarabishy, S. (2016), <u>Optimized Design to Robotic</u> <u>Production: Integrating Multipoint Forming and Free Form Material Deposition</u> <u>in the Mass Customization of Double Curved Facades</u>, in H. Abdalla, S. Abdelmohsen, A. Barracco, G. Retsin and M. Amer (eds.), proceedings of the *International Conference of Parallelism in Architecture, Environment and Computing* (*PACT*), pp. 109-116.

Abdelmohsen, S., Massoud, P., Tarabishy, S. and Hassab, A. (2016), <u>Rule-based versus Intuition-based Generative Design: An Inquiry into the Digital Chain Concept in Undergraduate Architectural Education</u>, in H. Abdalla, S. Abdelmohsen, A. Barracco, G. Retsin and M. Amer (eds.): proceedings of the *International Conference of Parallelism in Architecture, Environment and Computing (PACT)*, pp. 269-281.

**Abdelmohsen, S., Massoud, P. and Elshafei, A. (2016)**, <u>Using Tensegrity and</u> <u>Folding to Generate Soft Responsive Architectural Skins</u>, proceedings of the 34<sup>th</sup> *eCAADe International Conference*, Oulu, Finland, Vol. 1, pp. 529-536.

**Bakir, R. and Abdelmohsen, S. (2016)**, <u>Integrating Nanotechnology in the</u> <u>Design Process: An Ethnographic Study in Architectural Practice in Egypt</u>, in P. Lloyd and E. Bohemia (Eds.): *Future-Focused Thinking: proceedings of the Design* 

2017

2016

2015

2014

2013

2012

*Research Society (DRS 2016)* 50<sup>th</sup> *International Conference*, Brighton, UK, Vol. 5, pp. 1971-1986.

**Mansour, Y., Abdelmohsen, S., Mostafa, A., and Bakir, R. (2016)**, <u>The Injection</u> <u>of Nanotechnology in the Architectural Design Process</u>, in proceedings of the 8<sup>th</sup> *International Conference on Nanotechnology in Construction (NTC 2016)*, Sharm El-Sheikh, Egypt.

Fathy, F., Mansour, Y., Sabry, H., Abdelmohsen, S. and Wagdy, A. (2015), Cellular Automata for Efficient Daylighting Performance: Optimized Facade <u>Treatment</u>, in proceedings *BS2015: 14<sup>th</sup> Conference of the International Building Performance Simulation Association (IBPSA)*, Hyderabad, India, pp. 2705-2711.

Abdelmohsen, S. and Massoud, P. (2015), <u>Making Sense of those Batteries and</u> <u>Wires: Parametric Modeling between Emergence and Autonomy</u>, in G. Celani, D.M. Sperling and J.M.S. Franco (Eds.): *The Next City: proceedings of the 16th CAAD Futures 2015 International Conference*, © Biblioteca Central Cesar Lattes 2015, Sao Paulo, Brazil, pp. 279-296.

Abdelmohsen, S. and Massoud, P. (2015), <u>Integrating Responsive and Kinetic</u> Systems in the Design Studio: A Pedagogical Framework, in B. Martens, G. Wurzer, T. Grasl, W.E. Lorenz, and R. Schaffranek, (Eds.): *Real Time: proceedings of the 33rd eCAADe Conference*, Volume 2, Vienna University of Technology, Vienna, Austria, pp. 71-80.

Abdelmohsen, S. (2014), <u>An Inquiry into Designing in Context using</u> <u>Generative Systems</u>, *International Journal of Architectural Computing (IJAC)*, Vol. 12, No. 4, 477-494.

**Abdelmohsen, S. (2014)**, <u>A BIM-based Framework for Assessing Architectural</u> <u>Competition Entries</u>, in E.M. Thompson (ed.), *Fusion*, proceedings of the 32<sup>nd</sup> *eCAADe International Conference (eCAADe 2014)*, Department of Architecture and Built Environment, Newcastle upon Tyne, UK, Volume 2, pp. 473-483.

Abdelmohsen, S. (2014), <u>A BIM-based Framework for Outdoor Circulation</u> <u>Rule Checking</u>, in *Revista DeArquitectura*, Académico Departamento de Urbanismo, Facultad de Arquitectura y Urbanismo, Universidad de Chile, Chile, No. 26, pp. 20-28.

Abdelmohsen, S. (2013), <u>Reconfiguring Architectural Space using Generative</u> <u>Design and Digital Fabrication: A Project Based Course</u>, in proceedings of XVII *Congreso de la Sociedad Iberoamericana de Grafica Digital* (SIGRADI 2013), Universidad Tecnica Federico Santa Maria, Valparaiso, Chile, pp. 391-395.

Hosny, S., Elkholy, G., Abdelmohsen, S. and Mazen, M. (2013), Enhancing BIM Workflow Using the Auto-Finish Macro (AFM), Journal of Al Azhar University Engineering Sector (JAUES), Vol. 8, No. 26, 214-223.

Lee, J.-K., Lee, J., Jeong, Y.-S., Sheward, H., Sanguinetti, P., Abdelmohsen, S. & Eastman, C. (2012), <u>Development of Space Database for Automated Building</u> <u>Design Review Systems</u>, *Automation in Construction*, Vol. 24, 203-212, http://dx.doi.org/10.1016/j.autcon.2012.03.002.

Abdelmohsen, S. (2012), Communication of Design Intent in BIM-Enabled Architectural Practice: An Ethnographically Informed Analysis, Lambert Academic Publishing (LAP) GmbH & Co. KG, Saarbrücken, Germany, ISBN: 978-3-8473-7859-4.

Sanguinetti, P., Abdelmohsen, S., Lee, J.M., Lee, J.K., Sheward, H. & Eastman, C. (2012), <u>General System Architecture for BIM: An Integrated Approach for</u>

	Design and Analysis, Advanced Engineering Informatics, Vol. 26, Issue 2, 317-333, http://dx.doi.org/10.1016/j.aei.2011.12.001.
	Abdelmohsen, S. (2012), Genres of Communication Interfaces in BIM-Enabled Architectural Practice, in proceedings of the 6 <sup>th</sup> International Conference of the <i>Arab Society for Computer Aided Architectural Design (ASCAAD 2012)</i> , The Kingdom University, Manama, Bahrain, pp. 81-91.
2011	Abdelmohsen, S., Lee, JK. & Eastman, C. (2011), <u>Automated Cost Analysis of</u> <u>Concept Design BIM Models</u> , in P. Leclercq, A. Heylighen, and G. Martin (eds.), <i>Designing Together: CAAD Futures 2011</i> , PUL, pp. 403-418.
2009	Abdelmohsen, S. & El-Khouly, T. (2009), <u>Representing Reflective Practice in a</u> <u>Remote Design Collaboration Process</u> , in digital proceedings of the 3rd Conference of the <i>International Association of Societies of Design Research (IASDR</i> 2009), COEX, Seoul, Korea, pp. 1317 - 1326.
	Abdelmohsen, S. & Do, E. (2009), <u>Analyzing the Significance of Problem</u> <u>Solving Expertise and Computational Tool Proficiency in Design Ideation</u> , in T. Tidafi and T. Dorta (eds.), <i>Joining Languages, Cultures and Visions: CAAD Futures</i> 2009, PUM, pp. 273 – 287.
2000	Eastman, C., Lee, JK., Sheward, H., Sanguinetti, P., Jeong, YS., Lee, J. & Abdelmohsen, S. (2009), <u>Automated Assessment of Early Concept Designs</u> , in <i>Architectural Design</i> , Vol. 79 No. 2: 52-57, DOI: 10.1002/ad.851.
2008	Abdelmohsen, S. & Do, E. (2008), Energy Puppet: An Ambient Awareness Interface for Home Energy Consumption, in digital proceedings of the 7 <sup>th</sup> International Workshop on Social Intelligence Design (SID 2008), School of Architecture, Universidad de Puerto Rico, San Juan, Puerto Rico.
	Abdelmohsen, S. (2008), <u>Building Information Modeling and Architectural</u> <u>Practice: On the Verge of a New Culture</u> , in proceedings of the 1 <sup>st</sup> International Conference on Critical Digital, Harvard University Graduate School of Design, Cambridge, MA, USA, pp. 85-89.
	<b>Abdelmohsen, S., Eastman, C. et al. (2008)</b> , <u>Making the Water Cube</u> , in <i>Architecture Week online</i> , Article excerpted from BIM Handbook by Chuck Eastman et al., Copyright © 2008, with permission of the publisher, John Wiley & Sons.
	<b>Abdelmohsen, S. (2008)</b> , <u>Beijing National Aquatics Center</u> , <i>in</i> C Eastman, P Teicholz, R Sacks and K Liston, <i>BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors</i> , Wiley, pp. 375 – 388.
2007	Abdelmohsen, S. & Do, E. (2007), <u>Tracking Design Development through</u> <u>Decomposing Sketching Processes</u> , in Proceedings of the <i>International</i> <i>Association of Societies of Design Research (IASDR 2007)</i> , Hong Kong Polytechnic University School of Design, Hong Kong.
	Sanguinetti, P. & Abdelmohsen, S. (2007), <u>On the Strategic Integration of Sketching and Parametric Modeling in Conceptual Design</u> , in Proceedings of the 27th Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA 2007), Halifax, Nova Scotia, Canada, pp. 242-249.
	Abdelmohsen, S. & Do, E. (2007), TangiCAD: Tangible Interface for

Abdelmohsen, S. & Do, E. (2007), <u>TangiCAD: Tangible Interface for</u> <u>Manipulating Architectural 3D Models</u>, in proceedings of the 12<sup>th</sup> International Conference on Computer Aided Architectural Design Research in Asia (CAADRIA 2007), Nanjing, China, pp. 29-36.

2004	
	Hosny, S. & Abdelmohsen, S. (2004), <u>Integrating Intelligent Mixed Reality in</u> <u>Architectural Education: A Theoretical Model</u> , in <i>Al Azhar University</i> <i>Engineering Journal</i> , Cairo, Egypt, Vol. 7 No. 3, pp. 557-568.
SCIENTIFIC REVIEWS	Number of reviewed articles: 73
	Number of verified reviewed articles on <i>Publons</i> : 31 https://publons.com/dashboard/records/review/
	Member of Editorial Board, <i>Creative Sustainable Development</i> , Faculty of Architecture, Design & Built Environment, Beirut Arab University, Lebanon (since 2019).
	Reviewer, Archnet-IJAR: International Journal of Architectural Research, since 2019.
	Reviewer, Education and Research in Computer Aided Architectural Design in Europe (eCAADe 2019) International Conference, Porto, Portugal.
	Member of Editorial Board, <i>Architecture and Planning Journal</i> (APJ), Faculty of Architecture, Design & Built Environment, Beirut Arab University, Lebanon (since 2018).
	Reviewer, <i>Journal of Engineering and Applied Science</i> (JEAS), Faculty of Engineering, Cairo University, Egypt, since 2018.
	Reviewer, International Conference for Sustainable Design of the Built Environment (SDBE 2018), London, UK.
	Reviewer, Promotion documents for Associate Professor, Faculty of Architecture – Design & Built Environment, Beirut Arab University, Beirut, Lebanon.
	Reviewer, <i>Education and Research in Computer Aided Architectural Design in Europe</i> (eCAADe 2018) International Conference, Lodz, Poland.
	Reviewer, Qatar National Research Fund (QNRF), since May 2016.
	Reviewer and Guest Editor, International Journal of Parallel, Emergent and Distributed Systems, since December 2016.
	Reviewer, <i>CAADence in Architecture</i> International Conference, Budapest University of Technology and Economics, Hungary, 2016.
	Reviewer, <i>Education and Research in Computer Aided Architectural Design in Europe</i> (eCAADe 2016) International Conference, Oulu, Finland.
	Reviewer, The International Conference of the Association of Collegiate Schools of Architecture (ACSA), 2016.
	Member of Editorial Board, Environmental Sciences and Sustainable Development (ESSD) Journal, since January 2016.
	Reviewer, International Journal of Architectural Computing (IJAC), since September 2015.
	Guest Editor and Reviewer, <i>Parallelism in Architecture and Computing Techniques</i> ( <i>PACT</i> ) International Conference, University of East London (UEL), London, UK, since January 2015.
	Reviewer, Education and Research in Computer Aided Architectural Design in Europe (eCAADe 2015) International Conference, Vienna, Austria.

Reviewer, *Computer Aided Architectural Design Futures* (CAAD Futures 2015) Conference, Sao Paulo, Brazil. Reviewer, Ain Shams Engineering Journal (ASEJ), since July 2014.

Reviewer, *Education and Research in Computer Aided Architectural Design in Europe* (eCAADe 2014) International Conference, NewCastle, UK.

Reviewer, Automation in Construction (AUTCON) journal, since August 2013.

Reviewer, Arab Society for Computer Aided Architectural Design (ASCAAD 2013) Conference, Effat University, Jeddah, Kingdom of Saudi Arabia.

Reviewer, *Education and Research in Computer Aided Architectural Design in Europe* (eCAADe 2013) International Conference, TU Delft, Netherlands.

Reviewer, *Computer Aided Architectural Design Futures* (CAAD Futures 2013) International Conference, Shanghai, China.

Reviewer, XVII Congreso de la Sociedad Iberoamericana de Grafica Digital (SIGRADI 2013), Universidad Tecnica Federico Santa Maria, Valparaiso, Chile.

Reviewer, *Education and Research in Computer Aided Architectural Design in Europe* (eCAADe 2012) International Conference, Prague, Czech Republic.

Reviewer, Association for Computer Aided Design in Architecture (ACADIA 2011) Conference, Calgary/Banff, Canada.

Reviewer, *Education and Research in Computer Aided Architectural Design in Europe* (eCAADe 2011) International Conference, Ljubljana, Slovenia.

Reviewer, Association for Computer Aided Design in Architecture (ACADIA 2010) Conference, The Cooper Union, New York City, NY, USA.

Reviewer, *Education and Research in Computer Aided Architectural Design in Europe* (eCAADe 2010) International Conference, Zurich, Switzerland.

**DESIGN REVIEWS** 

External reviewer, Graduation Project, Architecture Engineering Program, Faculty of Engineering and Materials Science, German University in Cairo (GUC), Cairo, Egypt (2019).

External reviewer, Graduation Project, Department of Architectural Engineering and Environmental Design, Arab Academy for Science, Technology and Maritime Transport, Cairo Sheraton Campus, Cairo, Egypt (2019).

External reviewer, Graduation Project, Department of Architectural Engineering and Environmental Design, Arab Academy for Science, Technology and Maritime Transport, Abu Qir Campus, Alexandria, Egypt (2019).

Chair of Jury Panel, "Egypt on Mars" International Competition, Egypt (2019).

External reviewer, Building Construction IV, Faculty of Architecture, Design and Built Environment, Beirut Arab University (BAU) (2017).

External reviewer, Graduation Project, Department of Architectural Engineering and Environmental Design, Arab Academy for Science, Technology and Maritime Transport, Alexandria Campus, Cairo, Egypt (2017).

External reviewer, ARCH 221/1511, ARCH 250/2512, ARCH 251/2551, ARCH 352/3553, ARCH 453/3554, ARCH 454/4555, ARCH 456/4557, ARCH 490/4980 design studios, Department of Architecture, the American University in Cairo (AUC), Egypt (2012-Present).

External reviewer, Design II and Design V studio, Department of Architectural Engineering and Environmental Design, Arab Academy for Science, Technology and Maritime Transport, Sheraton Campus, Cairo, Egypt (2016).

Jury member, UN-USUAL-IT Workshop and Competition, organized by NIIT Studio, Alexandria, Egypt (2015).

External reviewer, Design II and Design III studios, Department of Architectural Engineering and Environmental Design, Arab Academy for Science, Technology and Maritime Transport, Smart Village Campus, Cairo, Egypt (2014-2015).

Jury member, RobArch (01) Kinetic Architecture Workshop and Competition, organized by Algoritm and Algorithmic Visual Lab (AVL), Cairo, Egypt (2014).

Jury member, Green and Sustainable Multi-Use Building Project, University to Work (UTW) Initiative, Engineering Consultants Group (ECG), Egypt (2014).

External reviewer, Common First Year (CFY) design studio, School of Architecture, Georgia Institute of Technology, Atlanta, GA, USA (2010-2011).

External reviewer, design studio project, School of Architecture, Design and Planning, University of Kansas, Online Review (2010).

# **RESEARCH PROJECTS**

# February 2019 - October 2019

# Measuring and Monitoring the Future 'Greening' of the Middle East

[Funded by the Arab-American Frontiers Fellowship, The National Academies of Sciences, Engineering and Medicine: \$3,400]

Role: <u>**Co-Principal Investigator (co-PI)</u>** and visiting researcher, Department of Architecture, the American University in Cairo, Cairo, Egypt</u>

Host Institution: Gaia Energy Research Institute LLC, Washington, DC, USA

Scope: Developing a preliminary time-dependent energy and emissions database for Egypt's current building stock and estimating the change in greenhouse gas and air pollution emissions with a 'greening' of Egypt's current building stock.

Team: Whitney Colella (PI), Sherif Abdelmohsen (co-PI), Christine Wiedinmyer, Katherine Emma Knowland

#### December 2018 - Present

# **EVE: Educational Virtual Environment**

[Funded by the American University in Cairo: \$450,000]

Role: <u>**Team Member**</u>, Department of Architecture, The American University in Cairo, Cairo, Egypt

Scope: Introducing collaborative virtual environments to the School of Sciences and Engineering undergraduate curriculum (Mechanical Engineering and Architectural Engineering programs as a pilot project for 3 years).

[AUC MENG Team: Lotfi Gaafar, Khalil El-Khodary; AUC ARCH Team: Sherif Abdelmohsen, Tamer El-Khouly]

#### August 2017 - July 2019

# Sponsored Research/Design Studio Program

[Funded by the Dr. Ezz Eldin Fahmy Fund: \$30,850]

Role: <u>Principal Investigator (PI)</u>, Department of Architecture, The American University in Cairo, Cairo, Egypt

Scope: Promoting new trends in architecture and exploring boundaries of architectural research, design and innovation through a sponsored research/design studio program.

[AUC Team: Sherif Abdelmohsen (PI), Basil Kamel]

#### July 2017 – June 2018

# Integrating Robotic Material Deposition and Multipoint Forming in the Mass Customization of Double Curved Facades

[Funded by the American University in Cairo: \$23,360]

Role: <u>Principal Investigator (PI)</u>, Department of Architecture, The American University in Cairo, Cairo, Egypt

Scope: Developing an optimized design-to-robotic production process for the mass customization of double curved façade panels, through an interdisciplinary collaboration between the Department of Architecture and the Department of Mechanical Engineering at The American University in Cairo. [AUC Team: Sherif Abdelmohsen (PI), Maki Habib, Basil Kamel]

# February 2017 – February 2019

**Soft Adaptive Building Skins for Energy Efficient Architecture** [Funded by the Bartlett Family Fund: \$50,000]

Role: <u>**Co-Principal Investigator (co-PI)</u>**, Department of Architecture, American University in Cairo, Egypt</u>

Scope: Exploring material and structural behavior of soft adaptive skins based on the hygroscopic properties of laminated timber.

[Princeton Team: Sigrid Adriaenssens (PI); AUC Team: Sherif Abdelmohsen (co-PI), Passaint Massoud, Rana Bahaa, Aly Magdy, Tasbeh Mokbel; Roma Tre Team: Stefano Gabriele, Luciano Teresi, Luigi Olivieri]

# August 2016 - Present

# **Responsive Brick Walls**

[Not Funded, Conducted at The American University in Cairo]

Role: Research Investigator, Department of Architecture, The American University in Cairo, Cairo, Egypt

Scope: Developing thermally responsive walls through parametric brick configurations.

[AUC Team: Khaled Tarabieh, Sherif Abdelmohsen, Yomna El-Ghazi, Rana Eldabaa, Asmaa Gamal, Mariam Amer]

# September 2015 – October 2016

Intelligent Facility Management (iFM)

[Funded by UNii Engineering Consultancy]

Role: R&D Developer and Team Leader, UNii Cairo, Cairo, Egypt

Scope: Developing automated systems for space layout planning, and facility, asset and property management using heuristic methods.

[UNii R&D Core Team: Sherif Abdelmohsen, Ayman Assem, Mohammed Ezzeldin, Ahmed Ibrahim]

#### July 2015 - June 2016

Soft Responsive Architectural Skins: Integrating Parametric Modeling, Physical Computing and Lightweight Structures to design Kinetic Façade Systems

[Funded by the American University in Cairo: \$6600]

Role: <u>Principal Investigator (PI)</u>, Department of Architecture, AUC, Cairo, Egypt

Scope: Developing low-cost and energy-saving kinetic façade skins using soft responsive systems.

[AUC Team: Sherif Abdelmohsen (PI), Passaint Massoud, Ahmed Elshafei]

# January 2013 – September 2014

# Planning and Project Management of E-JUST New Campus

[Funded by the Egyptian Ministry of Higher Education]

Role: <u>Research Manager</u> and member of FEDA CORELAB team, Faculty of Engineering, Ain Shams University, Cairo, Egypt

Scope: Developing interface for automated assessment, planning and management of E-JUST new campus project using BIM/GIS platform.

[FEDA CORELAB Team: Yasser Mansour (Head), Ashraf Nessim, Sherif Abdelmohsen, Hazem ElDaly, Ayman Assem, Hossam Massoud, Manar Mohammad, Mohammad Mekawy, Fatma Fathy, Aya Elsisy]

# June 2007 – September 2010

GSA Project: BIM Enabled Design Guide Automation

[Funded by the United States General Services Administration (GSA)]

Role: <u>**Team Member**</u>, AEC Integration Laboratory, College of Architecture, Georgia Institute of Technology, Atlanta, GA, USA

Scope: Developing interface for cost estimation from preliminary concept design BIM models for U.S. courthouse buildings using Solibri Model Checker (SMC) and Parametric Cost Engineering System (PACES).

[Georgia Tech Team: Charles Eastman (PI), Yeon-Suk Jeong, Jaemin Lee, Jin-Kook Lee, Paola Sanguinetti, Hugo Sheward, Sherif Abdelmohsen]

#### THESIS SUPERVISION

#### **Masters Students**

1- Fatma Fathy, Department of Architecture, Faculty of Engineering, Ain Shams University (Thesis Defense Date: 01/2016)

*Thesis: Utilizing Genetic Algorithms and Parametric Design for Efficient Daylighting Performance in Educational Spaces* 

2- Engy Habib, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 03/2014</u>)

Thesis: Towards Biogenesis in Architecture

- 3- Mohamed Mazen Mohamed, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 09/2013</u>) *Thesis: Using BIM Technology in Developing the Building Process*
- 4- Noran El-Abd, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 09/2016</u>)

Thesis: Enhancing the Implementation of BIM in the Egyptian AEC Industry

5- Ahmed Khalid, Department of Architecture, Faculty of Engineering, Cairo University (Thesis Defense Date: 05/2018)

*Thesis: Enhancing the Façade Performance of Existing Buildings through the Integration between Smart Materials and Parametric Geometries in Architecture* 

6- Nourhan Bassam, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 06/2018</u>)

*Thesis: A Framework for Enhancing User Experience in Existing Exhibit Spaces using Evolutionary Algorithms* 

7- Ibrahim Fateen, Department of Architecture, Faculty of Engineering, Ain Shams University (Thesis Defense Date: 04/2019)

*Thesis: Healthcare Facility Design Utilizing Digital Simulation and Evidence Based Method: A Study of Different Topologies of Emergency Departments* 

8- Shereen Alsharkawy, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 09/2019</u>)

Thesis: Using Mobile Augmented Reality Techniques in Architectural Education

9- Aly Ibrahim, Faculty of Fine Arts, Alexandria University (<u>Thesis Defense</u> Date: 04/2020)

Thesis: Using Programmable Materials Techniques to Improve the Building Skin Efficiency

10- Nada El Dohol, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 05/2020</u>)

Thesis: Biophilic Design as an Approach for Enhancing the Quality of the Views Out and Indoor Daylighting in Intensive Care Units

11- Muhammad Nagy, Department of Architecture, Faculty of Engineering, Ain Shams University

Thesis: Multi-Objective Optimization Methods as a Decision Making Strategy

12- Ayman Adel, Department of Architecture, Faculty of Engineering, Ain Shams University

Thesis: Impact of Interior Wall Configurations on Daylighting Performance using Shape Grammars

13- Yasser Salama, Department of Architecture, Faculty of Engineering, Ain Shams University

*Thesis: Influence of Evidence-based Design on Hospitals' Operational Efficiency: Case Study – Space Design of the Intensive Care Unit* 

14- Meral Gaber, Department of Architecture, Faculty of Engineering, Ain Shams University

Thesis: Integrating Biomimetic Design Approaches in Architectural Education

#### **Doctoral Students**

- 1- Ramy Bakir, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 04/2016</u>)
- Thesis: The Impact of Nanotechnology on the Environmental Design Process in Egypt
- 2- Ahmed Eliraqi, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 04/2017</u>)

Thesis: The Impact of Parametric Modeling on Creative Outcomes in Design Studio

3- Nancy Maged Yassa, Department of Architecture, Faculty of Engineering, Ain Shams University (<u>Thesis Defense Date: 06/2017</u>)

Thesis: Analysis of Experiences of Creative Class Workers in the Innovative Workplace

4- Deena El-Mahdy, Department of Architecture, Faculty of Engineering, Cairo University (Thesis Defense Date: 05/2018)

Thesis: Salt as a Sustainable Building Material using Additive Manufacturing Methods

5- Rana El-Dabaa, Department of Architecture, Faculty of Engineering, Ain Shams University

Thesis: Programming the Motion of Building Façade Materials by Controlling their Latent Passive Response

6- Islam Salem, Department of Architecture, Faculty of Engineering, Ain Shams University

Thesis: Tailoring of Free-Form External Envelopes in Architecture: Design to Production of Mass Customized Double Curved Façade Units Using Multipoint Forming Technology with Robotic Material Deposition

#### THESIS EXAMINATION

1- Haneen Almohammad, Department of Architecture, Faculty of Engineering, Cairo University (<u>Thesis Defense Date: 01/2017</u>)

MSc Thesis: Biomimetic Architectural Applications in Rebuilding Post-Conflict Communities: A New Age of Sustainability

2- Hanan Hafiz, Department of Architecture, Faculty of Engineering, Cairo University (<u>Thesis Defense Date: 06/2017</u>)

MSc Thesis: Digital Fabrication Integration in Architectural Education: Student Experience with the Design and Fabrication Process

3- Mohamed Elsayed, Department of Architectural Engineering and Environmental Design, College of Engineering and Technology, Arab Academy for Science, Technology and Maritime Transport (<u>Thesis Defense Date: 08/2017</u>) *MSc Thesis: Architectural Space Planning using Interactive Parametric Modeling: Application on the Egyptian National Housing Project*  4- Ahmed Hassab, Department of Architecture, Faculty of Engineering, Cairo University (<u>Thesis Defense Date: 05/2018</u>)

MSc Thesis: Digital Fabrication Technologies and Techniques in Architecture

5- Montasser Hamid, Department of Architectural Engineering and Environmental Design, College of Engineering and Technology, Arab Academy for Science, Technology and Maritime Transport (<u>Thesis Defense Date: 05/2018</u>) *MSc Thesis: Semantics of Building Information Modeling (BIM) for Digital Fabrication: A Knowledge-based Approach* 

6- Ghada Mourad, Department of Architecture, Faculty of Engineering, Cairo University (<u>Comprehensive Exam Date: 01/2019</u>)

*PhD Proposal Title: Inclusive Governance: Harnessing Digitally Networked Communities* 

7- Marwa Fahmy, Department of Architecture, Helwan University (<u>Thesis</u> <u>Defense Date: 09/2019</u>)

PhD Thesis: Applying Parametric Urban Design of Dynamic Neighborhoods

#### **PUBLIC TALKS**

Architecture of the Post-Digital: Between Emergence and Autonomy, Nile University (NU), Cairo, Egypt, "You Know Nothing About Architecture", November 2019.

Architecture and Programmable Matter, Architectural Systems Engineering Department, Faculty of Engineering, October University for Modern Sciences and Arts (MSA), Cairo, Egypt, May 2019.

**Performative and Generative Façade Investigations** (Khaled Tarabieh and Sherif Abdelmohsen), ZAK – World of Façades Egypt, "Immersing Local Architectural Influence with Modernism in Façade Designs", Nile Ritz-Carlton, Cairo, Egypt, April 2019.

Architecture and the Power of the Invisible Digital, "Visions in the Future of Egyptian Architecture" Plenary Session, ARCHCAIRO 8<sup>th</sup> International Conference (Building the Future Now: Rights to Better Living, Architecture and Contexts), Department of Architecture, Faculty of Engineering, Cairo University, Cairo, Egypt, April 2019.

**Programmable Skins,** "Hygroscapes: Innovative Shape-Shifting Façades" International Workshop, University Roma Tre, Rome, Italy, January 2019.

**Programmable Skins: A Hygromorphic Approach for Low-Cost Adaptive Building Façades,** Keynote speech, *Next Generation Buildings and Infrastructure* panel session, 6<sup>th</sup> Arab-American Frontiers of Science, Engineering, and Medicine Symposium, Kuwait City, Kuwait, November 2018.

**BIMMUNITY Smart Building Management Solution,** Open Mic talk, GITEX Future Stars Dubai, Dubai, UAE, October 2018.

**Computational Design: Perpetual or Ephemeral?** Invited public talk at the Faculty of Architecture, Istanbul Technical University (ITU), Istanbul, Turkey, April 2018.

**TimberMorphs: Designing with Shape Shifting Surfaces,** in CEE 546: Form Finding of Structural Surfaces, Department of Civil and Environmental Engineering, Princeton University, Princeton, NJ, USA, April 2017.

**Programmable(s) Matter: Designing with Low-cost Shape Changing Materials,** in *MakerFaire Cairo (MFC '17)*, Smart Village, Cairo, Egypt, April 2017 (http://makerfairecairo.com/speakers/sherif-abdelmohsen/)

**Computational Design: Perpetual or Ephemeral?** in *Beyond Form: Emerging Trends in Computational Design*, public talk at the Supreme Council of Culture (SCC), Architectural Committee, Cairo, Egypt, December 2016.

**GreenBIM Thinking: Strategies for Sustainable Design using Building Information Modeling**, in *BIM and Environmental Simulation Mini Symposium*, Lincoln School of Architecture International Summer School, University of Lincoln, Brayford Pool, Lincoln, UK, July 2012.

**BIM Expertise and Education** (Paola Sanguinetti and Sherif Abdelmohsen), Panel Session (BIM and Beginning Education), in *We Have Never Been Pre-Disciplinary* (24<sup>th</sup> National Conference on the Beginning Design Student), College of Architecture, Georgia Institute of Technology, Atlanta, GA, USA, March 2008

# PANEL SESSIONS

**Architecture in the Age of the 4th Industrial Revolution**, Roundtable session, *The 37th eCAADe/23rd SIGraDi International Conference*, Teatro do Campo Alegre, Faculty of Architecture, University of Porto, Porto, Portugal, September 2019. *Member of roundtable session* 

**ARC|FAB**, Panel session, *San3aHub*, *Fablab Cairo*, Egypt, June 2018. *Session Moderator* 

**ARC|FAB: Revisiting Architecture in the Age of Digital Fabrication**, Panel session, *MakerFaire Cairo (MFC '18)*, Smart Village, Cairo, Egypt, March 2018. *Session Moderator* 

**Building Dynamics: Exploring Architecture of Change**, Public Talk & Panel Discussion by Prof. Branko Kolarevic, hosted by the American University in Cairo (AUC), February 2018. *Session Moderator* 

**Role of ICT in Urban Planning and Urban Service Delivery,** Special UNDP session, Egypt Urban Forum (EUF), Cairo, Egypt, June 2015. *Session Moderator* 

**eCAADe 2015 International Conference** Parallel Session, Vienna, Austria. *Parallel Session Moderator* 

**SIGraDi 2013 International Conference** Parallel Session, Universidad Tecnica Federico Santa Maria, Valparaiso, Chile. *Parallel Session Moderator* 

#### **EXHIBITIONS**

**BIMMUNITY Smart Building Management Solution,** in 2018 Annual Digital Building Lab Symposium, Tech Showcase and Mixer, The Historic Academy of Medicine, Georgia Institute of Technology, Atlanta, GA, USA, October 2018.

**TimberMorphs: Low-cost Soft Adaptive Skins,** in *MakerFaire Cairo (MFC '17)*, Smart Village, Cairo, Egypt, April 2017.

**Department of Architecture Exhibition AUC,** Curation of exhibition and inspection halls for the UNESCO/UIA program revalidation visit, October 2017.

**Department of Architecture Exhibition AUC,** Curation and preparation of annual advisory board exhibition in coordination with student association, February 2017.

**Creased Casts**, in *Synthetic 2015 Exhibition* on Robotics and Additive Manufacturing, Le Mans, France, November 2015.

**Responsive and Kinetic Architecture**, in *Synthetic 2015 Exhibition* on Robotics and Additive Manufacturing, Le Mans, France, November 2015.

# **Flora Electronica Installation**

(Xmedia Group at Georgia Tech: Ali Mazalek and graduate students Remote Collaborators at NYU - Ken Perlin and graduate students) Presented at *Listening Machines* 2007, Eye Drum, Atlanta, GA, USA, April 2007

**TangiCAD: Tangible Interface for Manipulating Architectural 3D Models** Open House, Computational Design Laboratory (CoDeLAB), School of Architecture, Carnegie Mellon University, Pittsburgh, PA, USA, March 2006

#### POSTER PRESENTATIONS

# The Generalized Model of Expertise: Defining Strategies in Building Information Modeling (Paola Sanguinetti and Sherif Abdelmohsen)

- The Georgia Tech Research and Innovation Conference (gtRIC 2010), Georgia Institute of Technology, Atlanta, GA, February 8, 2010.

- The *Third International Conference on Design Computing and Cognition (DCC'08)*, Georgia Institute of Technology, Atlanta, GA, June 23-25, 2008.

**Energy Puppet: Providing Ambient Awareness for Home Energy Consumption** (Sherif Abdelmohsen and Ellen Yi-Luen Do)

- Sustainability Poster Session, Institute for Sustainable Technology and Development, Atlanta, GA, USA, April 18, 2007.

- Graduate Student Symposium (GSS2007), Georgia Institute of Technology, Atlanta, GA, USA, March 9, 2007.

- Graphics, Visualization and Usability (GVU) Spring Research Showcase, TSRB, Georgia Institute of Technology, Atlanta, GA, USA, March 1, 2007.

#### WORKSHOPS

# Hygroscapes: Innovative Shape Shifting Facades (2019)

Co-Organizer and Instructor, 1-week workshop on scalable programmable soft adaptive building skins using hygroscopic properties of wood, Department of Architecture, University Roma Tre, Rome, Italy

# AUC-HSA Summer School (Summer 2017)

Co-Organizer, 1-week summer school on "Robotic Transformations in Architecture" in partnership with Prof. Christian Bauriedel, Augsburg School of Applied Sciences (Hochschule Augsburg), Germany

## Hygroscapes: Innovative Shape Shifting Facades (2017)

Co-Organizer and Instructor, 1-week workshop on soft adaptive building skins using hygroscopic properties of laminated timber, Department of Architecture, American University in Cairo (AUC), Cairo, Egypt

#### Shape Shifting Surfaces (2017)

Co-Organizer and Instructor, 2-week workshop on soft adaptive building skins using hygroscopic properties of laminated timber, Department of Civil and Environmental Engineering, Princeton University, Princeton, NJ, USA.

# AUC-HSA Summer School (Summer 2015/Summer 2016)

Organizer, 2-week summer school on "Parametric Design and Innovative Building Facades" in partnership with the Augsburg School of Applied Sciences (Hochschule Augsburg), Technical University of Munich (TUM), University of Stuttgart, and Technical University of Berlin, Germany

# SANDWORKS Workshop (2015)

Host/organizer, 5-day workshop at AUC in partnership with Ecole Nationale Superieure d'Architecture Paris-Malaquais/Faculty of Fine Arts Alexandria

# Ain Shams University Neighborhood Initiative Workshop - Phase I (2013)

Co-organizer, 1-day workshop in partnership with Megawra, hosted by Department of Architecture, Ain Shams University, funded by IIE

## **XOTech EMotion Workshop (2013)**

Co-organizer and main tutor, performative skin and digital fabrication workshop, in partnership with MAGLAB Syria, hosted by Department of Architecture, Ain Shams University, Feb 2-9, 2013

#### CFB Inter-University Workshop (2012)

Co-organizer and moderator, 1-day workshop in partnership with Megawra, Cairo From Below, hosted by Department of Architecture, Ain Shams University, funded by IIE-Ford foundation

KRAFT 2012 (Kinematic and Responsive Architecture and Fabrication Technology) workshop and competition

Workshop organizer, in partnership with FabLab Egypt and Megawra

**Union of Mediterranean Architects (UMAR) Workshop, Cairo, Egypt (1999)** Workshop Participation: Replanning master plan & villas of Dreamland Project, 6<sup>th</sup> October City

Design Computing Workshop, Georgia Institute of Technology, Atlanta, GA, USA (2006) Workshop Participation

Workshop Participation

#### AWARDS/RECOGNITION

# Honors Diploma, Knowledge Application and Notion for Society (KANS) Scientific Competition, Mustafa Science and Technology Foundation (MSTF), Tehran, Iran

Recipient of Honors Diploma (1 of 5 recipients out of 20 awarded recipients, total of 1045 participants from 15 countries), November 2018 https://kans.mustafaprize.org/page/en/news#41

#### Certificate of Appreciation, ECG Academy, Cairo, Egypt

For effective role in University to Work (UTW) Program, (Class 2013/2014), November 2014

# Young Active Researcher Award, Faculty of Engineering, Ain Shams University, Cairo, Egypt

For outstanding research activity and effort (AY 2012/2013), June 2013

# **Certificate of Appreciation and Attendance, University of Lincoln, UK** *For attending and actively participating in the University of Lincoln Summer School in*

Architecture: Conservation and Sustainability, July 2012
Faculty Award of Merit for Best Doctoral Presentation

Recipient of award, School of Architecture, Georgia Institute of Technology, April 2012

Member Invitation, Golden Key International Honor Society Invited Member from Georgia Institute of Technology, December 2009

ARCC/ KING Student Medal for Excellence in Architectural + Environmental Design Research (http://www.arccweb.org/kingawd.htm) Georgia Institute of Technology Recipient for AY 2008/2009, April 2009

**Egyptian Cultural and Educational Bureau (ECEB) Program Scholarship** *Recipient of GM scholarship to pursue PhD degree at Georgia Tech, May* 2006

Certificate of Achievement, Department of Architecture, Faculty of Engineering, Ain Shams University *April 2005* 

# The Binational Fulbright Commission in Egypt (BFCE) Egyptian Student Program Grant

Recipient of non-degree grant to conduct research at Carnegie Mellon University February 2005

**Ain Shams University Annual Science Fair Honorary Award** *Recipient of AY 2003/2004 distinguished graduate students award, 2004* 

MEDIA

# Business Monthly, Journal of the American Chamber of Commerce in Egypt

Featured interview in "3D Printing Establishes Foothold in Egyptian Manufacturing", Business Monthly, p. 14-18, July 2019 http://www.amcham-egypt.org/BM\_Issues/July2019Issue.pdf

#### Archipreneur Magazine

Featured interview and article titled "Beyond BIM: Architects Create a Wider Building Management Tool", in Archipreneur Magazine, Report 02, p. 78 – 90, March 2019 https://archipreneur.com/report/?utm\_source=blog&utm\_medium=link&utm\_campaig n=launch02

# Archipreneur Magazine

Online article titled "The Future of Managing the Building Community", Dec 2018 https://archipreneur.com/bimmunity-future-building-community/

#### **Georgia Tech Digital Building Lab Channel**

Online video featuring participation in the DBL 2018 symposium showcase, Nov 2018 https://vimeo.com/channels/gtdbl/305639874

#### **GITEX Future Stars Dubai**

Online link to participation in GITEX Future Stars Dubai, Oct 2018 https://www.gitexfuturestars.com/exhibitor-products/bimmunity

#### AUC Today

Online article titled "Building Skins, Tearing Boundaries", Fall 2017 https://auctoday.com/2018/01/30/building-skins-tearing-boundaries/

#### AUC News

Online article titled "Designing with a Purpose: Architecture Students Propose Acoustic Solutions for AUC Library", Dec 2017 https://www.aucegypt.edu/news/stories/designing-purpose-architecture-studentspropose-acoustic-solutions-auc-library

#### **Hochschule Augsburg**

Online Article at the Faculty of Architecture and Construction, the University of Applied Sciences at Augsburg (Hochschule Augsburg), Aug 2017 https://www.hs-augsburg.de/Architektur-und-Bauwesen/StudentInnen-aus-Kairostarten-Robotikprojekt.html

# Princeton University School of Architecture

Online article describing the research collaboration between AUC and Princeton through the Bartlett Family Fund grant, Jan 2017 https://soa.princeton.edu/content/international-research-collaboration%3A-soft-adaptive-building-skins-energy-efficient-architecture

# **CNN International**

Interview at CNN Atlanta Headquarters, "Egypt in Crisis", Jan 2011 http://edition.cnn.com/TRANSCRIPTS/1101/29/se.02.html https://www.youtube.com/watch?reload=9&v=GcfcvIidjkU

#### **PROFESSIONAL WORK**

#### Qiba Square Development (2019 – Present)

Description: Tourist attraction and entertainment square Client: Madinah Region Development Authority (MDA) Location: Qiba Square, Al-Madinah Al-Munawwarah, Saudi Arabia Scope: Concept and schematic design proposal for square development Design Team: UDAAR Studio

# New Salheya University Campus (2019 - Present)

Description: New university campus (111,342 m<sup>2</sup> plot area, including faculty of dentistry, faculty of pharmaceuticals, and faculty of physiotherapy, faculty of science, faculty of engineering, faculty of business) Client: Private owner Location: Salheya, Sharkeya Governorate, Egypt Scope: Design development and construction documents for new university campus buildings Design Team: UDAAR Studio

# CAPSTONE Cliff Residence (2018 - 2019)

Description: Residential compound (81,840 m<sup>2</sup> plot area) Client: Paragon Developments Location: Sheikh Zayed City, Cairo, Egypt Scope: Masterplan, concept design and schematic design of residential units and landscape design Design Team: UDAAR Studio

# "Architecture of Al-Masjid Al-Nabawi" Book Project (2018 - Present)

Description: Documentation of the architecture of Al-Masjid Al-Nabawi and its evolution since the era of the Prophet (622 AD) till Ottoman extension (1860 AD) Client: Al-Madinah Al-Munawwarah Research and Studies Center Location: Al-Madinah Al-Munawwarah, Saudi Arabia Scope: 3D Modeling and graphical illustrations and documentation of the architecture of Al-Masjid Al-Nabawi Design Team: UDAAR Studio

# 'City of the Sun' Gates & Streetscape (2018 - 2019)

Description: Design of 'City of the Sun' compound gates, including landscape and street furniture of main street between gates (total of 1,500m) Client: ARABIA Holding Location: 6<sup>th</sup> of October City, Giza, Egypt Scope: Concept/schematic design, design development of gates and landscape Design Team: UDAAR Studio

#### **ENTRADA Commercial Strip (2018)**

Description: Commercial strip building (10,000 m<sup>2</sup> footprint, BUA 31,000 m<sup>2</sup>) Client: SOROUH Developments Location: Cairo Administrative Capital, Egypt Scope: Proposal for architectural design concept Design Team: UDAAR Studio

#### Campeiro Sheikh Zayed (2018)

Description: Residential compound, clubhouse and horse stables (40,125 m<sup>2</sup> plot area, total footprint 6,018 m<sup>2</sup>, total BUA 20,827 m<sup>2</sup>) Client: Private Owner Location: Sheikh Zayed City, Cairo Scope: Masterplan, concept and schematic design proposal for residential units Design Team: UDAAR Studio

#### Breeze Compound (2017 - 2018)

Description: Residential compound (302,400 m<sup>2</sup> plot area) Client: SOROUH Developments Location: Cairo Administrative Capital, Egypt Scope: Masterplan, landscape and architectural design proposal Design Team: UDAAR Studio

# King Marriott University Campus (2017 - 2018)

Description: New university campus (42,503 m<sup>2</sup> plot area, including Faculty of Dentistry, faculty of pharmaceuticals, and faculty of physiotherapy) Client: King Marriott University (Dr. Youssef Darwish) Location: King Marriott, Burj El-Arab, off Cairo-Alexandria Desert Road, Egypt Scope: Masterplan and schematic design of new university campus buildings including 3 faculties and administration building Design Team: UDAAR Studio

#### 'City of the Sun' Sales Center and Headquarters (2017 - 2018)

Description: Sales Center and Headquarters office building (3,000 m<sup>2</sup> total footprint area + 6-story panoramic observatory tower) Client: ARABIA Holding Location: 6<sup>th</sup> of October City, Giza, Egypt Scope: Concept design proposal Design Team: UDAAR Studio

### 'City of the Sun' Residential Apartments (2017)

Description: 26 residential apartment plots (average footprint 773 m<sup>2</sup>) Client: ARABIA Holding Location: 6<sup>th</sup> of October City, Giza, Egypt Scope: Concept design proposal of residential apartments (5 prototypes) Design Team: Consortium (UDAAR Studio, Beyond Vision, Centroid, Spaces Designs, Design & Build Studio)

# Government Institutions Pension Fund (GIPF) Offices (2017)

Description: Office building for Namibian government (3,174 m<sup>2</sup> plot area) Client: Government of Namibia (joint-venture with local office) Location: Ondangwa, Oshana Region, Namibia Scope: Concept design proposal – limited competition (2<sup>nd</sup> place winner) Design Team: UDAAR Studio

## Chamber of Commerce Office Building (2017)

Description: Office building and Headquarters (14,384 m<sup>2</sup> total BUA) Client: Saudi Chamber of Commerce Location: Jizan, Saudi Arabia Scope: Façade redesign and landscape design proposal Design Team: UDAAR Studio

# Private Residence (2017)

Description: Private villa with swimming pool (2,205 m<sup>2</sup> plot area) Client: Private Owner Location: Beirut, Lebanon Scope: Concept design for villa Design Team: UDAAR Studio

#### MyHome Furniture Showroom (2017)

Description: Furniture showroom and gallery (720 m<sup>2</sup> plot area) Client: Private Owner Location: Suez, Egypt Scope: Interior design and façade concept and schematic proposal Design Team: UDAAR Studio

# Oasis of Culture (2013 - 2014)

Description: Culture and Arts Center Client: Egyptian Ministry of Culture Location: 6<sup>th</sup> of October City, Egypt Scope: Theater façade and detailing, outdoor landscape features detailing Design Team: Morad Abdelkader Consultancy Office

# E-JUST New Campus Project Management (2012 - 2013)

Description: Planning and project management of Egypt-Japan University for Science and Technology (E-JUST) New Campus (356,583 m<sup>2</sup> plot area) Client: Egyptian Ministry of Higher Education Location: Borg El-Arab, Egypt Scope: Design review and project management of masterplan by Arata Isozaki Design Team: CoReLAB (Project Management Unit), Department of Architecture, Faculty of Engineering, Ain Shams University

#### New Connection Office Building (2012 - 2013)

Description: 6-story office building (4317 m<sup>2</sup> plot area) Client: El-Raowda for Real Estate Development Location: Fifth settlement, Cairo, Egypt Scope: BIM consultancy and management (Architectural, structural, MEP) Design Team: YMCA Consultants / KRAFT Studio

# Interior Design, Cairo International Bookfair (2004 - 2005)

Description: Cairo International Bookfair interior design proposal Client: General Authority for Investment & Free Zones, Ministry of Investment Location: Nasr City Fairground, Cairo, Egypt Scope: Cairo International Bookfair interior design proposal, Nasr City Fairground design development Design Team: YMCA Consultants

#### Egyptian and Arab World Pavilion, Frankfurter Buchmesse (2004)

Description: Frankfurt Bookfair (Arab World Guest of Honor) Client: Frankfurter Buchmesse Location: Frankfurt, Germany Scope: Interior design of main hall (Forum), exterior tent (Agora), and interior halls (Vias), Egyptian pavilion, and Arab pavilion Design Team: YMCA Consultants

# Horus Residential and Commercial Complex (2002)

Description: Residential and mixed-use complex Client: Private owner Location: Giza, Egypt Scope: Concept and schematic design and design development Design Team: Morad Abdelkader Consultancy Office

## San El-Hagar Museum (2001 - 2003)

Description: Museum for antiquities in Sharkeya region Client: Egyptian Ministry of Culture Location: Sharkeya Governorate, Egypt Scope: Concept and schematic design and design development for museum Design Team: Morad Abdelkader Consultancy Office

# Fardos Gardens (2000 – 2003)

Description: Residential compound Client: Public Security Sector, Egyptian Ministry of Interior Location: El-Zohor Grouping, El-Wahat Road, Egypt Scope: Masterplan, schematic design and design development for a group of private villas (Villa El-Refaie, Sabry, Saleh, Hisham, Shehata and Yassin) Design Team: Morad Abdelkader Consultancy Office

#### COMPETITIONS

# Thermally Responsive Brick Walls for Residential Building Façade Envelopes using Parametric and Robotic Simulation, 2020

Organizer: Technology for the Masses (TFM), IMPAQT Research and Development Competition and Workshop, co-funded by the Erasmus+ Programme of the European Union

Location: Bibliotheca Alexandrina, Alexandria, Egypt

Design Team: Sherif Abdelmohsen, Khaled Tarabieh, Rana El-Dabaa, Asmaa Hassan, Islam Salem, Yomna El-Ghazi

# School2Share (S2S): A Computational Approach for the Efficient Management of Shared School Facilities in Developing Countries using BIM and GIS, 2020

Organizer: Technology for the Masses (TFM), IMPAQT Research and Development Competition and Workshop, co-funded by the Erasmus+ Programme of the European Union

Location: Bibliotheca Alexandrina, Alexandria, Egypt Design Team: Sherif Abdelmohsen, Ayman Assem, Mohamed Ezzeldin

# Programmable Zero-Energy Interactive Façades, 2020

Organizer: Technology for the Masses (TFM), IMPAQT Research and Development Competition and Workshop, co-funded by the Erasmus+ Programme of the European Union Location: Bibliotheca Alexandrina, Alexandria, Egypt

Design Team: Rana El-Dabaa, Sherif Abdelmohsen

# The Quest of Light: Hadith Narrators Museum Architectural Ideas Competition, 2019

Organizer: Madinah Region Development Authority (MDA) Location: Madinah, Saudi Arabia Design Team: UDAAR Studio

# Istiqama Mosque: Dubai Creek Harbour Iconic Mosque Competition, 2018

Organizer: EMAAR Development Location: Dubai Creek Harbour, Dubai, United Arab Emirates Design Team: UDAAR Studio

KnowledgeFields: Dar Al-Uloum Public Library Redesign Competition, 2018 Organizer: Abdulrahman Al Sudairy Cultural Centre (AACC), KSA Location: Sakaka, Al Jouf Region, Saudi Arabia Design Team: UDAAR Studio

**Folium Trilaterum: Art Prison International Architecture Competition, 2018** Organizer: Young Architects Competitions and the Municipality of Favignana Location: Favignana, Italy Design Team: UDAAR Studio

Flocks in Flux: Dubai Feather Skyscraper, 2017 [Honorary Mention] Organizer: Bee Breeders (SkyHive Skyscraper Challenge) Location: Dubai, United Arab Emirates Design Team: UDAAR Studio

# **Hong Kong Pixel Homes International Architecture Competition, 2017** Organizer: Bee Breeders Architecture Competition Organizers Location: Hong Kong

Design Team: UDAAR Studio

# Science City International Architectural Competition, 2016

Organizer: Bibliotheca Alexandrina, under the auspices of the Union of International Architects (UIA) Location: 6<sup>th</sup> of October City, Cairo, Egypt Design Team: UNii Engineering Consultancy

# PENDO MOTUS +: eVolo Skyscraper Competition, 2016

Organizer: eVolo Magazine Design Team: Khaled Tarabieh, Sherif Abdelmohsen, Passaint Massoud, Islam Mashaly, Ahmed Elshafei

#### Next7 Architectural Competition, 2015

Organizer: Arch2O Design Team: KRAFT | Studio

# Winter Stations Design Competition, 2014 Organizer: Architect Magazine

Location: Toronto, Canada Design Team: KRAFT | Studio

**Parametric Mafroka: Design + Industry Competition, 2013 [Winning Entry]** Organizer: Egyptian Furniture Export Council Location: FURNEX Exhibition, Cairo, Egypt Design Team: KRAFT | Studio

# **Building for Bouwkunde Ideas Competition, 2008** Organizer: University of Delft (Design of the Faculty of Architecture Campus) Location, Delft, Netherlands Design Team: Tamer El-Khouly, Sherif Abdelmohsen

**Residential Commercial Complex, 2001** Location: Al-Madina, Saudi Arabia Design Team: Hany Abdullah, Sherif Abdelmohsen

# Office Building Complex, 2001

Location: 6<sup>th</sup> of October City, Cairo, Egypt Design Team: Mohammad Gabr, Tamer El-Khouly, Waleed Hosny, Sherif Abdelmohsen

**Pharmaceuticals' Syndicate Club, 2001** Organizer: Egyptian Pharmaceuticals Syndicate Location: Giza, Egypt

Design Team: Mohammad Gabr, Tamer El-Khouly, Waleed Hosny, Sherif Abdelmohsen

Graphics Poster [Honorary Prize] Organizer: CurrentCE company Designer: Sherif Abdelmohsen

## SERVICE

- Department of Architecture Representative, University Senate, American University in Cairo (since AY 2018/2019)
- Member and Secretary, Senate Curriculum Committee, American University in Cairo (since AY 2018/2019)
- Member, Academic Affairs Committee, School of Sciences and Engineering, American University in Cairo (since AY 2018/2019)
- Chair, Academic Affairs Committee, Department of Architecture, The American University in Cairo (since AY 2018/2019)

- Co-Chair, UNESCO/UIA Validation Committee, Department of Architecture, The American University in Cairo (since AY 2016/2017)
- Co-Chair, Strategic Planning and Academic Assessment Committee, Department of Architecture, The American University in Cairo (since AY 2016/2017)
- Member, Strategic Planning Committee, School of Sciences and Engineering (SSE), The American University in Cairo (AY 2016/2017)
- Member, Staff Committee, School of Sciences and Engineering (SSE), The American University in Cairo (AY 2016/2017)
- Director, Design Computing and Fabrication Laboratory, Department of Architecture, The American University in Cairo
- Member, Safety and Security Committee, Department of Architecture, The American University in Cairo (AY 2016/2017)
- Member, Studios and Labs Logistics Committee, Department of Architecture, The American University in Cairo (AY 2016/2017)

# AFFILIATIONS

- Associate Member, American Institute of Architects (AIA)
- Member, International Experts for Research Enrichment and Knowledge Exchange (IEREK)
- Member, Golden Key International Honor Society
- Member, Digital Building Laboratory, Georgia Tech
- Member, Student Construction Association (SCA), Georgia Tech
- Member, Board of Directors, Arab Society for Computer Aided Architectural Design (ASCAAD) (2012-2015)
- Member, Cultural Affairs Committee, Faculty of Engineering, Ain Shams University
- Member, International Accord Committee, Faculty of Engineering, Ain Shams University
- Alumnus, The Binational Fulbright Commission in Egypt (BFCE)
- Alumnus, CoDeLab, Carnegie Mellon University
- Member, Egyptian Engineering Syndicate

#### SOCIAL ACTIVITIES

- Member, Scientific Committee, Eco-House Competition, Department of Architecture, Ain Shams University (February 2014)
- Design Computing Representative for PhD newsletter, School of Architecture, Georgia Institute of Technology (Fall 2008)
- Participation in organizing Ain Shams architectural competition "FUTURE ARCHITECTURE 2100" (January 2005 – June 2005)
- Participation in Rotterdam Biennale (May 2003 July 2003) titled: "Mobility: Room with a View"
- Participation in Preparing Architectural Symposia (Feb. 2000 June 2001) [Architecture & Art, Architecture & Technology, Architecture & Environment, Airports] symposia, Supreme Council of Culture, Cairo

## ATTENDED CONFERENCES

- The XIX World Congress of the Union of International Architects (UIA '96), Barcelona, Spain, 1996.
- The XX World Congress of the Union of International Architects (UIA '99), Beijing, China, 1999.
- The 1<sup>st</sup> Annual Conference on Architectural Heritage, Library of Alexandria, Alexandria, Egypt, March 2002.
- The XXI World Congress of the Union of International Architects (UIA '02), Berlin, Germany, 2002.

- "New York: City in Motion" Conference, New York Institute of Technology, New York, NY, USA, March 2006.
- The 12<sup>th</sup> Annual Conference of the Association of Computer Aided Architectural Design Research in Asia (CAADRIA 2007), Southeast University, Nanjing, China, April 2007.
- 2<sup>nd</sup> International Association of Societies of Design Research (IASDR 2007) International Conference, Hong Kong Polytechnic University, Hong Kong, Nov 2007.
- "We Have Never Been Pre-Disciplinary", the 24<sup>th</sup> National Conference on the Beginning Design Student, Georgia Institute of Technology, Atlanta, GA, USA, March 2008.
- The 3<sup>rd</sup> International Conference on Design Computing and Cognition (DCC 08), Georgia Institute of Technology, Atlanta, GA, USA, June 2008.
- The 7<sup>th</sup> International Workshop on Social Intelligence Design (SID 2008), Universidad de Puerto Rico, San Juan, Puerto Rico, Dec 2008.
- The 13th International Conference of Computer Aided Architectural Design Research Futures (CAADFutures 2009), Universite de Montreal, Montreal, Quebec, Canada, June 2009.
- Digital Building Laboratory Symposium, Manufacturing Research Center, Georgia Institute of Technology, Atlanta, GA, USA, June 2010.
- Digital Building Laboratory Symposium, Klaus Advanced Computing Building, Georgia Institute of Technology, Atlanta, GA, USA, May 2011.
- The 6<sup>th</sup> International Conference of the Arab Society for Computer Aided Architectural Design (ASCAAD 2012), College of Architectural Engineering and Design, The Kingdom University, Manama, Bahrain, February 2012.
- XVII Congreso de la Sociedad Iberoamericana de Grafica Digital (SIGRADI 2013), Universidad Tecnica Federico Santa Maria, Valparaiso, Chile, November 2013.
- The 32<sup>nd</sup> Education and Research in Computer Aided Architectural Design in Europe International Conference (eCAADe 2014), Northumbria University, Newcastle, UK, September 2014.
- The 16<sup>th</sup> International Conference of Computer Aided Architectural Design Futures (CAADFutures 2015), Sao Paulo, Brazil, July 2015.
- The 33<sup>rd</sup> Education and Research in Computer Aided Architectural Design in Europe International Conference (eCAADe 2015), TU Wien, Vienna, Austria, September 2015.
- The 7<sup>th</sup> International Conference on Design Computing and Cognition (DCC 16), Northwestern University, Evanston, Illinois, USA, June 2016.
- The American Institute of Architects (AIA) Middle East Annual Conference, The American University in Cairo (AUC), Tahrir Campus, Cairo, Egypt, November 2016.
- The 2<sup>nd</sup> European Conference on Materials, Mechatronics and Manufacturing (ECMMM 2018), Krakow, Poland.
- The 36<sup>th</sup> Education and Research in Computer Aided Architectural Design in Europe International Conference (eCAADe 2018), Lodz, Poland, September 2018.
- GITEX Future Stars Startup Conference and Expo 2018, Dubai World Trade Center, Dubai, United Arab Emirates, October 2018.
- Digital Building Lab Annual Symposium, The Historic Academy of Medicine, Georgia Institute of Technology, Atlanta, GA, USA, October 2018.
- 6<sup>th</sup> Arab-American Frontiers of Science, Engineering, and Medicine Symposium, Kuwait City, Kuwait, November 2018.
- ARCHCAIRO 8<sup>th</sup> International Conference, Building the Future Now: Rights to Better Living, Architecture and Contexts, Department of

Architecture, Faculty of Engineering, Cairo University, Cairo, Egypt, April 2019.

- ZAK World of Façades Egypt, "Immersing Local Architectural Influence with Modernism in Façade Designs", Nile Ritz-Carlton, Cairo, Egypt, April 2019.
- The 18th International Conference of Computer Aided Architectural Design Futures (CAADFutures 2019), Daejeon, South Korea.
- The 37<sup>th</sup> eCAADe Conference / XVIII SIGraDi Conference, Faculty of Architecture, University of Porto, Porto, Portugal.