



Omar Osama ElRawy
MSc | LEED AP BD+C and EDGE Expert

37 Mohamed El Nady st,
Cairo, Egypt.

+2 0100 384 5737

omaroelrawy@gmail.com

<https://www.linkedin.com/in/omarelrawy>

https://www.researchgate.net/profile/Omar_Elrawy2

<https://www.daralandalus.org>

Summary

Omar's experience is multidisciplinary, with 5+ years of experience in green buildings' practice as well as research and academia.

In practice; Omar incorporates with projects' design and construction teams, as well as facility manager to achieve up-to-standard green buildings; through leading the Integrative Design Process (IDP), and providing enhanced Building Commissioning (BCx). Omar's experience is throughout the building process timeline; since project's schematic design phase till building operation. Omar also establish, develop, and fully document the whole-building's detailed energy model, conduct energy related Measurement and Verification (M&V) on occupied buildings, and perform analytics on Building Management System (BMS) data.

Besides professional practice, Omar believes in the significance of the complementary role of research. He completed his Master of Science (MSc) in Architectural Engineering in applying AI to energy simulation. He also has publications and is actively involved in working research related to Building Commissioning (BCx) and buildings' energy performance.

In-depth Knowledge & Key Experience

- Providing multi-disciplinary green building consultancy since pre-design to building's operation
- Leading project team for compliance with project's environmental goals and Certification(s).
- LEED Certification Requirements, compliance and Implementation Management:
 - Achieve sustainability through managing and leading the Integrated Design Process (IDP)
 - Establish and lead project's Cx team since early design phase
 - MEP review for compliance
 - Directing project team for compliance with codes and standards including ASHRAE 90.1, ASHRAE 62.1, ASHRAE 55, SMACNA, and SCAQMD
 - Daylight harvest system's design, simulation, measurement, and commissioning
 - Rigorous implementation of Indoor Air Quality (IAQ) management plan on-site
- Energy Modeling:
 - Whole building's detailed energy simulation and energy analysis
 - Develop energy efficiency measure
 - Code compliance analysis
 - Building design optimization
 - Predict building operation cost
 - Energy model auditing and replying LEED GBCI reviewer notes
- Achieving targeted building performance through ASHRAE compliant enhanced Cx
- Develop and monitor building's energy metering and analytics
- Establish sustainability awareness program to building occupants
- Plan and conduct Post Occupancy Evaluation (POE)

Current Positions

- **Research Associate** at the **American University in Cairo (AUC)** Sep 2018 – Present
- **LEED Projects Manager** at **EA Sustainable Building Consultants** Jun 2014 – Present
- **R&D head** at **Dar Alandalus** Jan 2018 - Present

Research / Publications

- April 2016: Accomplished an Arduino-based electronic circuit entitled "**ASHRAE 55 based weather station**", for determining real-time thermal comfort within the indoor environment based on ASHRAE 55-2004 standard.
- July 2013: "**Effect of Day-lighting Strategies on Thermal Performance in Historical Buildings**", BSCairo 2013, **IBPSA** conference at Cairo convention center, Egypt.
Link to proceedings: <http://eeer-ibpsaegypt.wixsite.com/home/academics>
http://docs.wixstatic.com/uqd/540f83_af46987273ac42d6a530450640b9c257.pdf (p. 380 to 387)
- March 2012: "**Green Theater – Significance and Challenges**", Quality of life conference, **MTI** University, Cairo, Egypt.

Computer Skills

- eQuest whole building energy simulation
- Tac Vista Workstation (Schneider Electric)
- Autodesk AUTOCAD
- Rhinoceros + Diva
- Ecotect
- IA-Quest
- Fuzor VR
- Adobe Photoshop Cs
- Festo software tools
- Visual Basic C
- Microsoft word, excel, and power point

Spoken languages

- Arabic 'Mother Language'
- English 'Very Good ' (**IELTS** Academic UKVI: [6.5])
- French 'Fair'

Education

- **MSc**, Architectural Engineering, Ain Shams University Dec 2017
Major: Environmental Science and Building Technology
Thesis title: "The Integration of Buildings' Energy Simulation Tools (ESTs) with Intelligent Decision Support Systems (IDSS)"
- **BSc**, Building Engineering, Ain Shams University, (CHEP) Jul 2011
Major: Environmental Building Engineering
General Grade: **Distinction**
Project Grade: **Distinction**
- General Secondary school class with a cumulative score of **95.2%** Jun 2005

Employment History

- **Project Engineer at EA Sustainable Building Consultants** Jul 2010 – Jun 2014
 - **Duties**
 - Sustainable design review
 - Review on MEP drawings
 - Whole building energy simulation using eQuest, as per ASHRAE 90.1.
 - LEED compliant Daylight simulation
 - Developing building envelop specifications and drawings
 - Implementing design phase Cx requirements
 - On-site LEED coordination and documentation
- **Conscript site engineer at the armed forces** Mar 2012-Mar 2013
 - **Duties**
 - Supervising site works
- **Intern at "Osman Group"** Jul, 2009
 - **Duties**
 - Supervising infrastructure construction works
- **Intern at "Dar Al-Handasah" share and partners** May, 2009
 - **Duties**
 - Designing infrastructure networks
 - ✓ **Achievements**
 - Awarded the winner team in the design competition
- **Intern at "The Arab Contractors"** Jul 2008
 - **Duties**
 - Supervising construction works of NATA office building in new Cairo city

Interests

- Sea fishing, kayaking, XC&MTB Cycling, Travelling, Electronic circuits (Arduino), Playing electric guitar, and Instrumental music composing and recording.

List of Referees

Available upon request.