

# Mohamed M. El Gabaly

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## EDUCATION

**MS, Structure Engineering**, University of California, San Diego, Graduated June 2017

**GPA: 3.97**

**BS, Structure Engineering**, University of California, San Diego, Graduated June 2016

**GPA: 3.58**

**Professional Certificate, Full-stack Coding**, University of California, Los Angeles, Expected August 2019

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## WORK EXPERIENCE

### Thornton Tomasetti Engineer

Los Angeles, USA  
(September 2017-Present)

#### Property Loss Consultant

- Analyzing pre- and post-loss risks, damage and property claims arising from natural or man-made perils
- Assessing damage for mechanical and electrical components and structural elements
- Conducting a variance analysis between the company's data and the consultant on the owner side. The disputable claims have been settled during the biggest project covered in Macau, China
- Playing a key role in settlement meetings and representing the company with the claim adjusters to determine claim values and action plans moving forward
- Managing and distributing tasks across vendors and stakeholders throughout consultation projects to reach a claim settlement within given timeframes
- Projects covered were across various key locations such as China, Mexico, New Zealand, various States in the United States of America and the United Arab Emirates

#### Structural Design

- Analyzed a Façade structural system composed of beams, trusses and struts that support a fiber reinforced polymer (FRP) mesh
- Designed structural components of gravity (beams, trusses, columns) and lateral (shear walls, braced frames, moment frames) systems
- Produced and back checked structural plans and details using Bluebeam Revu and Revit
- Coordinated design activities with the project manager and fellow design engineers as well as the design team to insure understanding of project goals and expectations

#### Research & Development

- Introduced the use of drones to inspect and survey portfolio of affected buildings by disasters
- Used Pix4D for post-processing drone data to build 2D and 3D models of structure
- Coding small programs on Python and HTML to help facilitate everyday tasks
- Research incorporating AI in detecting structure distress

### Dar Al-Handasah Consultant

(June-September 2015)

#### Structural Engineering, Cairo, Egypt

- Conducted computer modeling and analysis of various structure materials and applications of gravity and wind loads using various programs such as etabs & SAP
- Manually verified the output results of the computer models for various Structural elements

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## TEACHING EXPERIENCE

### Structure Engineering department, (UCSD)

- Teaching Assistant for Seismic Concrete design (March 2017– June 2017)
- Reader for PreStressed Concrete Design (March 2017– June 2017)
- Teaching Assistant for Seismic Steel design (January 2017– March 2017)
- Reader for Earthquake Engineering (October 2016– December 2016)
- Reader for Seismic Design (March 2016– June 2016)

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## PROFESSIONAL ACTIVITIES

- **Member**, The Society of Collegiate Leadership and Achievement, LLC (2015-2017)
- **Member**, Structural Engineers Association of Southern California (SEAOSC) (2013-2016)
- **Creative Public Relations Committee Member**, Model Arab League (2012-2013)

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## SKILLS & QUALIFICATIONS

- **Languages:** Perfect command of written & spoken English & Arabic.
- **Computer/Software Skills:** Revit; Blue Beam; STADD.Pro; Hilti; AutoCAD; SAP2000; ETABS; Solid Works; Adobe Photoshop; Google AdWords; Microsoft office; Pix4D; Rhino
- **Computer/Coding Skills:** MATLAB; Python; HTML; JavaScript; JQuery; CSS; Bootstrap by Twitter; Firebase; Terminal
- **License:** FAA Remote Pilot; Certificate# 4218833

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## AWARDS/HONORS

- **Provost honors, Academic Achievement**, UCSD