Abdelrahman Mabrouk, EIT

Winnipeg, Manitoba, R3Y 0Y1, Canada Phone: +1(431) 554-9494, E-mail: abdrahmanmabrouk6@gmail.com

Profile

A highly motivated Engineer-In-Training and is eligible for Professional Engineer registration with 10 years of experience in civil design and construction coordination. A Skilled Structural EIT is currently looking for a transition from Ph.D. to Industry. Excellent communication skills were gained as a Sessional Instructor and Teaching Assistant. Proficient critical thinking and creativity were achieved to address challenges effectively.

Education

- **Ph.D. Candidate:** Civil Engineering Department, The Price Faculty of Engineering, **University of Manitoba**, **Canada**. (GPA: 3.83/4.5)
- **Graduate Diploma:** Civil Engineering Department, Faculty of Engineering, Benha University- Shobra Campus, Egypt. (GPA: 3.4/4)
- **Master of Science** in Structural Engineering from Cairo University, Egypt in June 2017 (GPA 3.6/4). Thesis title is "3D Nonlinear Analysis of RC Beams Shear-strengthened with FRP Sheets."
- **Bachelor of Science** in Construction and Building Engineering from Arab Academy for Science, Technology, and Maritime Transport (AASTMT), Egypt in July 2012. 3rd of the class, Excellent with honor (GPA 3.85/4)

Skills

- OpenFOAM toolbox with Linux
- ANACONDA Navigator for Python
- LIGGGHTS DEM
- MATLAB
- Primavera P6

- ABAQUS Finite Element
- SAP Finite Element
- AutoCAD
- Salome-Meca
- Code-Aster Analysis
- RStudio
- TeXstudio
- QGIS
- Borland C++

Standards and design codes knowledge

CSA A23.3:19, CSA S6:19, CSA 16:19, ACI 318-19, ACI PRC-201.2-23, ACI PRC-440.2-23, ASTM C136/C136M-19, ASTM C143/C143M-15a, ASTM C78/C78M-21, ASTM C666/C666M-15, ECP 203-2020, ECP 205-2001, and ECP 208-2005

Professional employment

- Structural Designer at the Archeological Buildings Maintenance Center (ABMC) From 01/08/2017 to 30/11/2020
 - ✓ Inspected and evaluated historical buildings conditions, analyzed loads, modeled complex structural simulation, and designed strengthening details of concrete and masonry buildings to improve the structural capacity and service performance.

- Rretrofitted and rehabilitated large-scale government-owned projects of reinforced concrete and steel buildings to increase the structural foundation capacity.
- ✓ Pioneered construction precautions to enhance the contractor's efficiency.
- Project Coordinator at GM Construction Industry. From 01/09/2012 to 31/07/2017
 - ✓ Managed budgets, estimated costs, and ensured timely delivery of equipment and materials for small and medium-scale projects to achieve safety regulations and attain building codes specifications.
 - ✓ Implemented Bill of Quantities, supervised construction methods, and managed construction from soil cutting to finishing stages of large and Mega-projects to improve quality control and achieve clients` desires.
 - ✓ Scheduled and planned projects using Primavera P6 to ensure projects delivery on time.

Academic employment

University of Manitoba

Teaching Assistant (TA), Civil Engineering Materials, CIVL 2770 and Introduction to Statics, ENG 1440, From Fall 2021 to present.

Sessional Lecturer: Summer 2022, Department of Mathematics, MATH 1300 – Distance Education

• International College of Manitoba (ICM)

Winter 2024. Sessional Instructor. Introduction to Statics. ENG 1440

Winter and Summer 2023, TA, Introduction to Statics, ENG 1440

• Arab Academy for Science, Technology, and Maritime Transport (AASTMT), Construction and Building Engineering Department, Cairo, Egypt.

Assistant Lecturer: from Fall 2012 to Fall 2020, (Courses taught: Structural Analysis, Solid Mechanics, Civil Engineering Materials, Design of Reinforced Concrete Structures, and Design of Steel Structures, Construction Surveying, Soil Mechanics, and Engineering Geology)

Volunteering

- University of Manitoba (UM) International Students` Centre, Orientation for newcomers. (Winter 2024)
- Mentor at UM Muslim Students' Association (MSA) (Winter 2024)
- Summer Buddy Program for Newcomer International Students (Summer 2023)
- Mentor for University of Manitoba first year students (Winter 2023)
- Site Civil Engineer: Antec Corporation Hassan Allam Holding, Egypt, July to August 2018 and 2019