# **Ahmed Bahgat Tawfik**

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# **RESEARCH INTERESTS**

Finite element simulations

Design of reinforced concrete structures

Rehabilitation and stiffness restoration

Machine learning

Bridge engineering

Material science

#### **PUBLICATIONS**

#### **Nonlinear ABAQUS Simulations for Notched Concrete Beams**

Tawfik AB, Mahfouz SY, Taher SE-DF. Nonlinear ABAQUS Simulations for Notched Concrete Beams. *Materials*. 2021; 14(23):7349. https://doi.org/10.3390/ma14237349 (Journal: Materials. Q1, I.F:3.623).

#### **EDUCATION**

**Master of science degree in structural engineering (2022):** Arab Academy for science, technology & maritime transport (AASTMT).

**Bachelor's degree in construction and building engineering (2012 – 2017) :** Arab Academy for science, technology & maritime transport (AASTMT).

Tabary el-hegaz secondary school (2009 – 2012)

#### **APPOINTMENTS**

- Teaching assistant at Arab Academy for Science, Technology & Maritime Transport (AASTMT) 2017 Present.
- Structural engineer at Arab Academy Consultancy Office 2017 2019

#### **TEACHING EXPERIENCE**

#### Teaching assistant, Arab academy for science, technology & maritime transport

- Design of Reinforced Concrete Structures (1), CB354
- Design of Reinforced Concrete Structures (2), CB455
- Foundation Analysis & Design, CB463
- Structural Analysis (1), CB241
- Structural Analysis (2), CB343
- Soil Mechanics, CB362
- Testing of Materials, CB251
- Building Construction, CB322
- Technical Installations in Buildings, CB431
- Environmental Control and Energy, CB533

# HONORS / AWARDS

- Graduated in Faculty of Engineering, Construction and Building Department at Arab Academy for Science, Technology and Maritime Transport (AASTMT) with Excellent with Honors Degree with a GPA of (3.90/4)
- Graduation Project: Design of Reinforced Concrete Structures with the Degree "Excellent" A+
- Ranked as One of the Best Members (First 10 Members) in ECG's University to Work Initiative UTW (Round 8)

## **LANGUAGES**

Arabic (native) English (very good oral and written fluency)

## **MEMBERSHIPS / AFFILIATIONS**

Graduate Member of University to Work Internship Program at Engineering Consultants Group (ECG) – I'm ranked as one of the best members -first 10 members- In ECG University to Work Initiative UTW -Round 8- September 2016

Member at ACI Egg Protection Device Competition, November 2016

## **COMMUNITY SERVICE**

Volunteer Participant in Community Service Activities that helped the Ministry of Housing, Utilities & Urban Communities Collecting Critical and Sensitive Data.