



**Basic Information :**

**Name :** Ahmed M. Ebid  
**Title :** Associate professors

Associate professors Ahmed Abdelkhalq - Structural Engineering Department  
He graduated from Structural Engineering department, Faculty of Engineering, Ain Shams University, Cairo, Egypt in June 1996. He got his M.Sc. and Ph.D. from the same department in 2001 and 2004 respectively. Presently, he is a lecturer in structural department, faculty of engineering, Future University in Egypt. His scientific research interests are in Geo-technical engineering, concrete structures, applications of (AI) in structural engineering. He published 16 researches in Geo-technical engineering, repairing using FRP, optimization of concrete structures & applications of (GP) in structural engineering. He is a consultant in Geo-technical engineering & Concrete structures since 2012.

**Education:**

Certificate	Major	University	Year
PhD	Civil Engineering		2004
Masters	Civil Engineering		2000
Bachelor	Civil Engineering		1996

**Teaching Experience:**

Name Of Organization	Position	From Date	To Date
FUE	Associate Professor	16/02/2014	Current

**Researches / Publications :**

- Modeling suction of unsaturated granular soil treated with biochar in plant microbial fuel cell bioelectricity system
- Strengthening of Eccentric and Concentric Reinforced Concrete Columns Using CFRP Sheets with and without Confinement: A Numerical Study
- Predicting the impact of adding metakaolin on the flexural strength of concrete using ML classification techniques . A comparative study
- Influence of alkali molarity on compressive strength of high-strength geopolymer concrete using machine learning techniques based on curing regimes and temperature
- Modeling of the effect of gradation and compaction characteristics on the california bearing ratio of granular materials for subbase and landfill liner construction
- Data Utilization and Partitioning for Machine Learning Applications in Civil Engineering
- Assessment of efficiencies of different additives to improve CBR value for the highway industry
- Estimating the compressive strength of lightweight foamed concrete using different machine learning-based symbolic regression techniques
- Multiple AI predictive models for compressive strength of recycled aggregate concrete
- Estimating the energy consumption for residential buildings in semiarid and arid desert climate using artificial intelligence
- Predictive modeling of wide-shallow RC beams shear strength considering stirrups effect using (FEM-ML) approach
- Unified AI-Based Predictive Models for the Ultimate Capacity of Multi-Planar Gapped KK Steel Pipe Joints
- Developing preliminary cost estimates for foundation systems of high-rise buildings





Erodibility of Nanocomposite-Improved Unsaturated Soil Using Genetic Programming, Artificial Neural Networks, and Evolutionary Polynomial Regression Techniques
Estimating the swelling potential of non-carbon. based binder (NCBB)-treated clayey soil for sustainable green subgrade using AI (GP, ANN and EPR) techniques
The Numerical Analysis of Replenishment of Hydrogel Void Space Concrete Using Hydrogels Containing Nano-Silica Particles through ELM-ANFIS
Using Artificial Intelligence Techniques to Predict Punching Shear Capacity of Lightweight Concrete Slabs
Improving the Self-Healing of Cementitious Materials with a Hydrogel System
Durability Enhancement of Sustainable Concrete Composites Comprising Waste Metalized Film Food Packaging Fibers and Palm Oil Fuel Ash
Effect of desiccation on ashcrete (HSDA)-treated soft soil used as flexible pavement foundation: zero carbon stabilizer approach
Parametric study of Unstiffened multi-planar tubular KK-Joints
Soil with Ordinary Cement Addition
An Integrated Approach to Using Sheep Wool as a Fibrous Material for Enhancing Strength and Transport Properties of Concrete Composites
Evaluating the lateral subgrade reaction of soil using horizontal pile load test results
Optimum Design of Fully Composite, Unstiffened, Built-Up, Hybrid Steel Girder Using GRG, NLR, and ANN Techniques
Enhanced Acoustic Properties of a Novel Prepacked Aggregates Concrete Reinforced with Waste Polypropylene Fibers
Predicting the behaviour of laterally loaded flexible free head pile in layered soil using different AI (EPR, ANN and GP) techniques
Effects of Sulfate and Sulfuric Acid on Efficiency of Geopolymers as Concrete Repair Materials
Estimating the subgrade reaction at deep braced excavation bed in dry granular soil using genetic programming (GP)
Estimating the Ultimate Bearing Capacity for Strip Footing Near and within Slopes Using AI (GP, ANN, and EPR) Techniques
Gap Study for the Impact of Braced Deep Excavation on the Behavior of Excavation Bed
Decision Support System to Select the Optimum Steel Portal Frame Coverage System
"Selecting optimum structural system for R.C. multistory buildings considering direct cost"
Estimation of the undrained shear strength of east Port-Said clay using the genetic programming
Identification of Knowledge Gaps in Applying Knowledge Areas of Project Management
Efficiencies of Different Techniques to Protect Rebars Against Corrosion
Effect of Wrapping Reinforced Concrete Surface with FRP Sheets on Corrosion Resistance
Effect of Plastering Layer on Corrosion Resistances of Reinforced Concrete Beams
Predicting (Nk) factor of (CPT) test using (GP): Comparative Study of MEPX & GN7
Experimental Study for Strengthening of RC Rectangular Columns with Anchored CFRP Sheets
Mathematical Approach to Simulate Soil Behavior Under Shallow Compaction
Decision support system for optimum soft clay improvement technique for highway construction projects
STRENGTH CHARACTERISTICS OF HANDY LAY-UP GFRP I-BEAMS
THEORETICAL STUDY FOR R.C. COLUMNS STRENGTHENED WITH GFRP WITH DIFFERENT MAIN STEEL RATIO
Optimum replacement depth to control heave of swelling clays
Optimum penetration depth of cantilever sheet pile walls in dry granular soil based on reliability analysis concept and its impact on the shoring system cost
IMAGE COMPRESSION USING GENETIC PROGRAMMING
OPTIMUM ALTERNATIVE TO REDUCE COLUMN SIZE CONSIDERING BEHAVIOR AND COST IMPACTS ON BUILDING
Simple Mathematical Approach to Simulate Granular Fill Behavior under Dynamic Compaction

Simplified Approach to Consider Cracking Effect on the Behavior of Laterally Loaded RC Piles

Estimating the economic quantities of different concrete slab types

**Chapter :**

Chapter Ten - Predicting subgrade and subbase California bearing ratio (CBR) failure at Calabar-Itu highway using AI (GP, ANN, and EPR) techniques for effective maintenance