Basic Information :

Name :	Ahmed M. Ebid
Title :	professor

Associate professors Ahmed Abdelkhaleq - Structural Engineering Department
He graduated from Structural Engineering department, Faculty of Engineering, Ain Shams University, Cairo, Egypt in June1996. 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	Professor	16/02/2014	Current

Researches / Publications :

Experimental Investigation on Punching Shear Behavior of Isolated Footings Resting on Sand
Improving engineering properties of laterite soil using eco-friendly biopolymers: a study on strength and compressibility
A Pure bending model to predict the large deformations of thin rectangular isotropic plates subject to uniform lateral load
Developing, evaluating and reviewing ML-based predictive model for numerical databases in civil engineering
An industrial integration framework based on QFD for selecting the optimal electrical poles
Recurrent neural network long short term memory model to detect the pile toe using raw data of pile integrity test
Experimentally investigating the structural capacity of slender web tapered built up plate girder with web opening
Evaluating the planning efficiency for repetitive construction projects using Monte Carlo simulation technique
Developing machine learning frameworks to predict mechanical properties of ultra-high performance concrete mixed with various industrial byproducts
The impact of adding dual and triple combinations of quicklime and plastic wastes and palm fibers on the California bearing ratio of fine sand
Data-driven framework for prediction of mechanical properties of waste glass aggregates concrete
Centralized, decentralized and hybrid wastewater management approaches ï Gap study
Cost optimization for flexible pavement on fine sand improved using palm fibers
Modeling the compressive strength of concrete at different curing regimes using machine learning
Impact of lightweight clay aggregate with slag and biomedical waste ash on self-compacting concrete using machine learning approach
Evaluating the impact of waste marble on the compressive strength of traditional concrete using machine learning

Copyright É 2026 [Future University in Egypt]. All rights reserved.

Innovative BWMï TOPSIS-based approach to determine the optimum delivery method for offshore projects
Mechanical properties of self compacting concrete reinforced with hybrid fibers and industrial wastes under elevated heat treatment
Predicting the strengths of basalt fiber reinforced concrete mixed with fly ash using AML and Hoffman and Gardener techniques
Modeling the compressive strength behavior of concrete reinforced with basalt fiber
Developing advanced datadriven framework to predict the bearing capacity of piles on rock
Improving the punching capacity of footings using geocell, geogrid and granular soil replacement
The influence of Bentonite content on the properties of its mixture with Kaolinite
Evaluating the strength of industrial wastesbased concrete reinforced with steel fiber using advanced machine learning
Physics-informed modeling of splitting tensile strength of recycled aggregate concrete using advanced machine learning
Optimizing the utilization of Metakaolin in pre-cured geopolymer concrete using ensemble and symbolic regressions
Evaluating the slope behavior for geophysical flow prediction with advanced machine learning combinations
Prediction and validation of mechanical properties of self-compacting geopolymer concrete using combined machine learning methods a comparative and suitability assessment of the best analysis
Modeling suction of unsaturated granular soil treated with biochar in plant microbial fuel cell bioelectricity system
Predicting the impact of adding metakaolin on the flexural strength of concrete using ML classification techniques ï 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
Estimating the strength of bi axially loaded track and channel cold formed composite column using different AI based symbolic regression techniques
Multiple AI predictive models for compressive strength of recycled aggregate concrete
Estimating the strength of soil stabilized with cement and lime at optimal compaction using ensemble based multiple machine learning
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
Predicting the impact of adding metakaolin on the splitting strength of concrete using ensemble ML classification and symbolic regression techniques ï a comparative study
Estimating the stress distribution within MERO joint using (FEM-ANN) hybrid technique
Modeling the influence of lime on the unconfined compressive strength of reconstituted graded soil using advanced machine learning approaches for subgrade and liner applications
Machine learning base models to predict the punching shear capacity of posttensioned UHPC flat slabs
Optimizing the superstructure configuration of highway bridges for cost-effective construction
Strengthening the RC Frames To Resist Lateral Loads and Differential Settlement ï Review
Seepage Analysis and Optimization of Reservoir Earthen Embankment with Double Textured HDPE Geo-Membrane Barrier
Advancing Concrete Design: Shear Capacity in Wide Beams with Shallow Depths
The Impact of Shear Reinforcement Amount and Arrangement on the Shear Capacity of Shallow RC Beams: An Experimental Study

Copyright É 2026 [Future University in Egypt]. All rights reserved.

Characterization of net zero pozzolanic potential of thermally derived metakaolin samples for sustainable carbon neutrality construction
Effect of Metakaolin and Ashcrete blend on the mechanical properties of lateritic soil for sustainable subgrade and subbase construction
Overview of meshfree modeling of the flowability of fresh self-compacting concrete for sustainable structures
Prediction of the cementing potential of activated pond ash reinforced with glass powder for soft soil strengthening, by an artificial neural network model
Predicting the rheological flow of fresh self-consolidating concrete mixed with limestone powder for slump, V-funnel, L-box and Orimet models using artificial intelligence techniques
Modeling of Heat Transfer in Massive Concrete Foundations Using 3D-FDM
The Impact of Aspect Ratio, Characteristic Strength and Compression Rebars on the Shear Capacity of Shallow RC Beams
Shallow and Wide RC Beams, Definition, Capacity and Structural Behavior ï Gap Study
Predicting thermal behavior of mass concrete elements using 3D fnite diference model
Measuring and Rigidity Moduli of GFRP Experimentally
Advanced machine learning prediction of the unconfined compressive strength of geopolymer cement reconstituted granular sand for road and liner construction applications
The influence of nano silica precursor on the compressive strength of mortar using Advanced Machine Learning for sustainable buildings
Runtime based metaheuristic prediction of the compressive strength of net zero traditional concrete mixed with BFS, FA, SP considering multiple curing regimes
GRG optimized response surface powered prediction of concrete mix design chart for the optimization of concrete compressive strength based on industrial waste precursor effect
The influence of fines on the hydro-mechanical behavior of sand for sustainable compacted liner and sub-base construction applications
The influence of fly ash and blast furnace slag on the compressive strength of high performance concrete (HPC) for sustainable structures
Behavior of Centrifuged GFRP Poles Under Lateral Deflection
AI Based Estimation of Swelling Stress for Soils in South Africa
Ant Colony Optimization based algorithm to determine the optimum route for overhead power transmission lines
Using FEM-AI Technique to Predict the Behavior of Strip Footing Rested on Undrained Clay Layer Improved with Replacement and Geo-Grid
Capacity of unstiffened multi-planar tubular KK-gap joints under anti-symmetric loading
Heat and mass transfer in different concrete structures : a study of self-compacting concrete and geopolymer concrete
Extensive overview of soil constitutive relations and applications for geotechnical engineering problems
AI Mix Design of Fly Ash Admixed Concrete Based on Mechanical and Environmental Impact Considerations
Punching Capacity of UHPC Post Tensioned Flat Slabs with and Without Shear Reinforcement: An Experimental Study
Selecting the Safety and Cost Optimized Geo-Stabilization Technique for Soft Clay Slopes
Punching shear behavior of HSC & UHPC post tensioned flat slabs ï An experimental study
Decision support system to select the optimum construction techniques for bridge piers
Innovative predictive model for flexural strength of recycled aggregate concrete from multiple datasets
Selected AI optimization techniques and applications in geotechnical engineering
Simulation of self-compacting concrete (SCC) passing ability using the L-box model for sustainable buildings
Prediction and environmental appraisal of traffic noise intensity by auto-regressive integrated moving average technique
Flow simulation of self-consolidating concrete through V-funnel for sustainable buildings
Cost optimization of multi-story steel buildings during the conceptual design stage

Copyright É 2026 [Future University in Egypt]. All rights reserved.

Behavior of strip footing rested on undrained clay using consistency limits-based constitutive law
Evaluation of the Compressive Strength of CFRP-Wrapped Circular Concrete Columns Using Artificial Intelligence Techniques
Hydraulic conductivity predictive model of RHA-ameliorated laterite fo rsolving landfill liner leachate,soil and water contamination and carbon emission problems
Load-Settlement Curve and Subgrade Reaction of Strip Footing on Bi-Layered Soil Using Constitutive FEM-AI Coupled Techniques
Optimal Compressive Strength of RHA Ultra-High-Performance Lightweight Concrete (UHPLC) and Its Environmental Performance Using Life Cycle Assessment
Evaluating Shear Strength of Light-Weight and Normal-Weight Concretes through Artificial Intelligence
(AI) in Infrastructure Projectsð Gap Study
Global warming potential-based life cycle assessment and optimization of the compressive strength of fly ash-silica fume concrete; environmental impact consideration
Effect of metakaolin on the mechanical properties of lateritic soil
Estimating the Buckling Load of Steel Plates with Center Cut-Outs by ANN, GEP and EPR Techniques
Strength of Composite Columns Consists ofWelded Double CF Sigma-Sections Filled with Concreteð An Experimental Study
Modeling the confined compressive strength of CFRP-jacketed noncircular concrete columns using artificial intelligence techniques
Solving geophysical flow problems in Luxembourg: SPH constitutive review
Innovative Overview of SWRC Application in Modeling Geotechnical Engineering Problems
Decision Support System for Optimum Repair Technique of Concrete Bridges Girders in Egypt
Predictive models of swelling stressð a comparative study between BP and GRG ANN
Multi-Objective Prediction of the Mechanical Properties and Environmental Impact Appraisals of Self-Healing Concrete for Sustainable Structures
Evaluating the Compressive Strength of Recycled Aggregate Concrete Using Novel Artificial Neural Network
Estimating the weights of latticed power transmission towers using Genetic programming
Application of Polyacrylic Hydrogel in Durability and Reduction of Environmental Impacts of Concrete through ANN
FRP Poles: A State-of-the-Art-Review of Manufacturing, Testing, and Modeling
Redmud nano-fines potential for improving the geotechnical properties of ameliorated reconstituted black cotton soil
Mechanical Characteristics and Self-Healing Soil-Cementitious Hydrogel Materials in Mine Backfill Using Hybridized ANFIS-SVM
Estimating the OptimumWeight for Latticed Power-Transmission Towers Using Different (AI) Techniques
Multi-Objective Optimization of Sustainable Concrete Containing Fly Ash Based on Environmental and Mechanical Considerations
AI (ANN, GP, and EPR)-based predictive models of bulk density, linear-volumetric shrinkage & desiccation cracking of HSDA-treated black cotton soil for sustainable subgrade
Erodibility of Nanocomposite-Improved Unsaturated Soil Using Genetic Programming, Artificial Neural Networks, and Evolutionary Polynomial Regression Techniques
Estimatingtheswellingpotentialofnon-carboní basedbinder(NCBB)-treatedclayeysoilforsustainablegreensubgradeusingAI (GP,ANNandEPR)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

Copyright É 2026 [Future University in Egypt]. All rights reserved.

Different AI Predictive Models for Pavement Subgrade Stiffness and Resilient Deformation of Geopolymer Cement Treated Lateritic 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

Copyright É 2026 [Future University in Egypt]. All rights reserved.