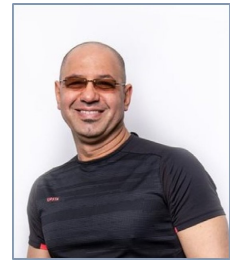


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Qualifications

Registered Professional Engineering - State of California, Board of Engineers and Land surveyors - State of California
Award Date: 15 Feb 2009

PhD, New laboratory test procedure for the enhanced calibration of constitutive models, Georgia Institute of Technology
Award Date: 6 May 2006

Master, Evaluation of pullout capacity of reinforced Ottawa sand under drained and undrained conditions, Purdue University
Award Date: 4 Aug 2000

Master, Numerical assessment of the effects of grout characteristics on settlement measurements in borehole extensometers, American University in Cairo
Award Date: 1 Jun 1999

Employment

Department of Civil Engineering
Faculty of Science and Engineering
29 Aug 2022 → present

Natural Resources and Environment Research Group
29 Aug 2022 → present

Adjunct Professor
Monash University Malaysia
Malaysia
1 Aug 2022 → 1 Aug 2024

Visiting Scholar - McGill University
1 Nov 2015 → 1 May 2016

Senior Lecturer
Monash University Malaysia
Malaysia
1 Sept 2014 → 1 Aug 2022

Lecturer
German University in Cairo
Egypt
1 Aug 2012 → 1 Aug 2014

Research outputs

Enhancing Pavement Sustainability: Prediction of the Pavement Condition Index in Arid Urban Climates Using the International Roughness Index
Radwan, M., Bayoumi, A. & Zahran, E. S. M. M., 10 Apr 2024, In: Sustainability. 16, 8, 3158.

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Modeling the Impact of Massive Open Online Courses (MOOC) Implementation Factors on Continuance Intention of Students: PLS-SEM Approach

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Internal Instability in Soils: A Critical Review of the Fundamentals and Ramifications

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Value-Engineering Methodology for the Selection of an Optimal Bridge System

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Prediction of shear wave velocity in fine-grained soils from cone penetration test data: toward a global approach

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A flow-dependent estimation of constriction size distribution in gap-graded soils: an integrated statistical approach

Dassanayake, S. M. & Mousa, A., 2022, In: *Geotechnique Letters*. 12, 1, p. 46-54 9 p.

Genesis of transitional behaviour in geomaterials: a review and gap analysis

Mousa, A. & Youssef, T. A., 2021, In: *Geomechanics and Geoengineering*. 16, 4, p. 298-324 27 p.

Pilot field implementation of suction dredging for sustainable sediment management of dam reservoirs

Kantoush, S. A. & Mousa, A., 2021, In: *Journal of Hydraulic Engineering*. 147, 2, 13 p.

A critical review and gap analysis on the use of coal bottom ash as a substitute constituent in concrete

Gooi, S., Mousa, A. A. & Kong, D., 20 Sept 2020, In: *Journal of Cleaner Production*. 268, 121752.

Bacteria encapsulation using synthesized polyurea for self-healing of cement paste

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Shear wave velocity in the East Nile Delta clay: correlations with static CPT measurements

Fayed, A. & Mousa, A., Apr 2020, In: *Geotechnical and Geological Engineering*. 38, 2, p. 2303-2315

A statistical inference of hydraulic shear and clogging in internally unstable soils

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Hydraulic Response of an Internally Stable Gap-Graded Soil Under Variable Hydraulic Loading: A Coupled DEM-Monte Carlo Approach

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Behnia, A., Chai, H. K., GhasemiGol, M., Sepehrinezhad, A. & Mousa, A., 1 Apr 2019, In: *Engineering Fracture Mechanics*. 210

A novel damage index for online monitoring of RC slabs under monotonic loading by integration of process controlling into acoustic emission technique

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Voids distribution of pavement filters subjected to permeating fines: a coupled DEM-statistical inference

Dassanayake, S. & Mousa, A., 2019, *4th International Conference on Civil Engineering and Materials Science (ICCEMS 2019)* . Vol. 652.

Lightweight concrete in America: presence and challenges

Mousa, A., Mahgoub, M. & Hussein, M., Jul 2018, In: *Sustainable Production and Consumption*. 15, p. 131-144 14 p.

Revisiting the calibration philosophy of constitutive models in geomechanics

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Plausible failure mechanisms of wildlife-damaged earth levees: insights from centrifuge modeling and numerical analysis

Saghaee, G., Mousa, A. & Meguid, M. A., 2017, In: *Canadian Geotechnical Journal*. 54, 10, p. 496-1508 13 p., 10.

Experimental evaluation of the performance of earth levees deteriorated by wildlife activities

Saghaee, G., Mousa, A. & Meguid, M. A., Feb 2016, In: *Acta Geotechnica*. 11, 1, p. 83-93 11 p.

The "gray zone": fabric and consistency of natural transitional soils

Mousa, A., 2016, In: *Arabian Journal of Geosciences*. 9, 1, 39.

A business approach for transformation to sustainable construction: An implementation on a developing country

Mousa, A., 2015, In: *Resources, Conservation and Recycling*. 101, p. 9 -19 11 p.

Six Sigma DMAIC for shaking stagnant construction cultures – a conceptual perspective

Mousa, A., 2015, In: *Journal of Civil Engineering and Environmental Sciences*. 1, 1

A simple test method for rapid measurement of fines content in soils

Mousa, A., Mahgoub, M. & Wiszowaty, P., 2014, In: *Geotechnical Testing Journal*. 37, 2

A Survey-based vision for restructuring concrete business in the new residential communities in Egypt

Zidan, A., university, M. & Mahgoub, M., 1 Nov 2013, In: *Industrial and Systems Engineering Review*. 1, 2, p. 162-172

On the effects of animal burrows on the performance of homogeneous earthen structures

Saghaee, G., Meguid, M. & Bayoumi, A., 2012, *Canadian Geotechnical Conference- GeoManitoba 2012, Winnipeg, Manitoba*. Canadian Geotechnical Society, Vol. 1. 5 p.

On the evaluation of settlement measurements using borehole extensometers

Bayoumi, A., 2011, In: *Geotechnical and Geological Engineering*. 29, 1, p. 75-90 16 p.

Wildlife and safety of earthen structures: a review

Mousa, A. & Meguid, M., 2011, In: *Journal of Failure Analysis and Prevention*. 11, 4, p. 295-319 25 p.

Pullout capacity of a reinforced soil in drained and undrained conditions

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Press/Media

Impacts

Rehabilitating Bridges with Lightweight Concrete

Ahmad Mousa (Participant)

Student theses