

The Spring 2025 Adjunct Faculty Spotlight is on Khaled Mabrouk



From Lumberjack to ISE

I was Born in Egypt, living in Qahira and Iskendereya for 11 years, before family immigrated to the USA. We settled in Detroit and half my life was spent in Southeast Michigan; thus, I am a big fan of Detroit sports teams and muscle cars.

My first BS was Forestry from University of Michigan Ann Arbor. BTW, UofM stopped awarding Forestry degrees in 1982. I worked as a Timber Cruiser in the Southeast while based in Jackson Mississippi. Eventually, I realized I was meant to be an engineer.

Forestry has remained a central theme in my life. Took a side trip to Amazon when on a project in Brazil. I was a member of the first docent class at Nichols Arboretum, developed multiple tours for the Arboretum (one which they deliver to this day), and lead "Bug Tours" for home-schooled kids. Plus, for 8 years I applied ISE tools to the Produce Industry.



2nd grade Egypt (so serious!)

High School DC Trip Michigan Forestry Camp, U of

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Khaled Mabrouk, cont.

After graduating from Purdue with BS ISE, I accepted a role with Accenture (aka Andersen Consulting) in Chicago. Accenture provided excellent training in software development that included a six-month graveyard shift assignment as a control room operator. The operator role provided a deep understanding of IT infrastructure. Most Androids avoided this assignment. I loved it (this pattern repeats).

From there, I moved to a simulation software startup based in Pennsylvania, Systems Modeling Corporation. SMC's SIMAN/Cinema was a "hot" product, and over the next 4 years SMC tripled in size. And I enjoyed "many" roles. Writing Users Manuals, developing databases, managing international rep network, providing tech support, heavy involvement in sales & marketing, and opening SMC's first satellite office in Ann Arbor. Good training for next role.

I started a simulation consulting firm, Model Builders, which forced me to "sharpen the saw" for both technical and communication skills. Had fun working across a wide variety of industries across the USA. Enjoyed continual exposure to new processes in manufacturing, service, and supply chain industries; including Kanban System Design & Implementations.

Next, I was recruited by Union Pacific Railroad to assist in their implementation of Lean Thinking Continuous Improvement. I switched hats from simulation modeling & analysis, to leading CI teams and coaching leadership behavioral change. Over the next five years, our CI team contributed to a 15-point improvement in UPRR's operating margin. The complexity inherent to managing train networks made this a challenging and fun role.

We moved to Santa Cruz County in January 2011. Farming is big in both SC and Monterey Counties, and I was drawn into spending 8 years supporting farming companies' efforts to improve productivity with Lean Thinking and simulation.

I first taught Simulation at Eastern Michigan University and Wayne State University. In Fall 2012, I started teaching simulation at SJSU. In Fall 2021 I added the Senior Design Project. Teaching is perfect for this stage in my career. Passing knowledge and expertise to



Farm Bureau Event

5S Implementation

future ISEs and watching them grow is very satisfying. In addition to his teaching role, Khaled is actively involved in various university activities. He supports the Student Arena Competition team, participates in the ISE Department Advisory Council (DAC), and is a member of the Career Champions committee. He also contributes to the Lecturer's Nuts 'n Bolts Workshops, graduation ceremonies, and serves on the Tau Beta Pi Talks committee.