Curriculum Vitae

Mahdi Yaqub, PhD, DEng, MBA

Industrial Engineering, Texas A&M University Commerce

EDUCATION

Ph.D. in Systems Engineering, George Washington University, Washington D.C.
D.Eng. in Electrical Engineering, Santa Clara University, Santa Clara, California
M.B.A. in Business Administration, Golden Gate University, San Francisco, California
M.S., Electrical & Computer Engineering, San Jose State University, San Jose, California
M.S., Industrial & Systems Engineering, San Jose State University, San Jose, California
B.S., Mechanical Engineering, Southern Illinois University, Carbondale, Illinois

EXPERIENCE

A. Academic Positions (7 Years)

Institution	Category	Job Title	Tenure
San Jose State University, San Jose California	Higher Education	Visiting Associate Professor/ Endowed Pinson Chair	2 years
Monterrey Institute of Technology (Tec De Monterrey), Mexico	Higher Education	Visiting Associate Professor	1 year
Texas A&M University Commerce	Higher Education	Assistant Professor	4 years

B. Industry Positions (23 Years)

Institution	Industry	Job Title	Tenure
Intel Corporation Santa Clara, California	Semiconductors- Microprocessors	Program Manager, Staff Engineer Senior Process Engineer	13 years
Nobel Designs San Francisco, California	Semiconductors- Solar Photovoltaic (PV)	Consultant	8 years
NASA AMES Research Center Moffett Field, California	Aerospace	Graduate Student Researcher	2 years

(i) Professional Appointments/ Employment

A. Academia – 7 years

- Tenure-Track Assistant Professor, 4 years:
  Engineering & Technology, Industrial Engineering Program
  Texas A&M University-Commerce

- Visiting Associate Professor, 1 year:
  Industrial & Systems Engineering,
  Monterrey Institute of Technology (Tec de Monterrey), Mexico.

- Endowed Pinson Chair Professor (Associate Professor Rank), 2 years:
  Industrial & Systems Engineering,
  San Jose State University, San Jose, California.

B. Industry – 23 years

- Intel Corporation, Santa Clara, California (13 years):
  Program Manager, Intel Microprocessor Group, Staff Engineer and Senior Process Engineer.

- Nobel Designs, San Francisco, California (8 years):
  Consultant/ Chief Operating Officer
  Solar Photovoltaic Energy Systems

- NASA AMES Research Center, Moffett Field, California (2 years):
  Graduate Research Intern through San Jose State University Foundation.

(ii) Teaching Experience

A. University Teaching Experience

1. **Courses Taught at Texas A&M Commerce, Tenure Track Assistant Professor**
   Fall 2016 - Present
   1. IE 312 Operations Research I
   2. IE 313 Operations Research II
   3. IE 495 Industrial Systems Design Capstone Project
   4. IE 471 Preparation for Industrial Systems Design
   5. IE 491 Honors Reading
   6. IE 486 Service Systems Design
   7. IE 444 Systems Engineering
   8. ENGR 411 Engineering Management
   9. IE 409 Work Systems Design
   10. IE 314 Statistical Quality Control
   11. TMGT 340 Managerial Statistics
   12. IT 340 Quality Management and Improvement

2. **Courses Taught at Monterrey Institute of Technology (Tec De Monterey), Mexico, Visiting Associate Professor**
   Summer 2015 to Fall 2016
   1. Operations Research (Optimization Models)
   2. System Dynamics Simulation
   3. Data Analytics

3. **Courses Taught at San Jose State University, Visiting Endowed Pinson Chair, Visiting Associate Professor (2-years term)**
   Fall 2011 to Fall 2013
   1. ISE 222 Advanced Systems Engineering (graduate course)
   2. ISE 155 Systems Engineering (senior-level undergraduate course)
   3. ISE 135 Design & Analysis of Engineering Experiments (senior undergraduate)

B. College Curriculum Design Experience

2019 – 2020	MSE (Master of Science in Engineering (MSE) with three different tracks; industrial, electrical, and Construction Engineering
2011 – 2013	As Endowed Pinson Chair at San Jose State Univ., developed a master's degree in Systems Engineering including detailed curriculum.

C. Students' Mentoring Experience

Graduate Students Mentorship
Spring 2012 and Spring 2013. Advanced Systems Engineering (ISE 222) industry sponsored projects. San Jose State University Industrial & Systems Engineering Department.

(iii) Research Experience

A. Research Grants

2019 Texas A&M University Energy Institute, College Station Texas.
Accelerating the Development and Deployment of Free-Emission Smart Infrastructure
Role: Lead Principal Investigator
Seed Grant Amount: $40,000.

2020 In Progress, National Science Foundation (NSF), Planning Grant for Engineering Research Center for Optimizing Energy Infrastructure of Autonomous Vehicles
Role: Lead Principal Investigator

2019 Texas A&M Engineering Experiment Station (TEES)
Winner, Seed Grant for Optimizing Energy Infrastructure of Autonomous Vehicles
Role: Lead Principal Investigator

2018 Texas A&M Engineering Experiment Station (TEES) Winner,
Seed Grant for Emission-Free Smart Infrastructure
Role: Lead Principal Investigator

B. Selected Publications

2020	Yaqub M., Zahra P., Huseyin B., Deepak G., Rahman M., Xu Y., "Optimizing Energy Infrastructure of Autonomous Vehicles," Proceedings of the 2020 Institute of Industrial and Systems Engineering Annual Conference. November, 2020.
2019	Yaqub M., "Improved Techniques for Optimizing Hospital Critical Care Operation, "Proceedings of the 2019 Institute of Industrial & Systems Engineering Annual Conference. May 2019.
2020	Yaqub M., Institutional Effectiveness for Industrial Engineering Program, September 2020.
2019	Yaqub M., Institutional Effectiveness for Industrial Engineering Program, July 2019.
2018	Yaqub M., Institutional Effectiveness for Industrial Engineering Program, July 2018.
2017	Yaqub M., "Hospital Capacity Optimization Model," International Conference on Industrial Engineering and Technology Management (IC-IETM), Dallas, TX. April 2017.
2013	Yaqub M., Mazzuchi T., and Sarkani S., (2013), Addressing Solar-PV Power Generation: Commercialization Assessment for the US Energy Market. Taylor and Francis, Distributed Generation and Alternative Energy Journal, Vol. 28, No. 1, January 2013.

2010	Yaqub, M. and Rahman, M., (2010), "Risks Analysis of Smart Grid Enterprise Architecture Under Uncertainty", International Consortium on Systems Engineering (INCOSE), Information Systems Security Association (SSIA), INCOSE, Cyber Security and Enterprise Architecture Conference Proceedings, Nov. 2010.
1995	Statistical Techniques for Integrated Circuits Testing Characterization, Semiconductor Manufacturing Technology Institute (SEMATECH) Journal, May 1995.
1994	Integrated Circuits Reliability Monitors, Intel Technology Journal.

(iv) Service Experience

A. Department

1. Industry Advisory Board (IAB) Coordinator for Industrial Engineering
2. Development of MS Engineering Program
3. Career and Professional Development Advisor
4. Institutional Effectiveness (IE) Author for the Industrial Engineering Program

B. Industry Partnership

Solicited, directed, and supervised the following industry senior design capstone projects:

Academic Terms	Company Sponsor	Project Category
Fall 2016 – Spring 2017		
1.	Lowe's Distribution Center, Mt. Vernon, Tx	optimization
2.	ITCS, Commerce Tx	information systems
Fall 2017 – Spring 2018		
3.	L3 Communication	automation
4.	Campbell's	optimization
5.	Lowe's Distribution Center, Mt. Vernon, Tx	facilities design
Fall 2018 – Spring 2019		
6.	Priefert Manufacturing	Process Improvement
7.	Rodger Wades	Quality System
8.	Lowe's Distribution Center	Facility Design
9.	Lowe's Distribution Center	Automation
Spring 2018 & Spring 2019		
10.	Hunt County Medical Center	Healthcare System
Fall 2019 – Spring 2020		
11.	Airbus	Work Systems Design
12.	L3Harris	Facilities Design
13.	Lime Media	Quality System Design
Fall 2020 – Spring 2021		
14.	Texas Department of Transportation	Facilities Planning & Design
15	Saputo Inc.	Renewable Energy Design

(v) Selected Awards and Honors

2019	Principal Investigator (PI) for Optimizing Energy Infrastructure of Autonomous Vehicles, Texas A&M Engineering Experiment Station (TEES), College Station, Texas.
2019	Principal Investigator (PI) for Accelerating the development and Deployment of Smart Emission-Free Infrastructure. Texas A&M Energy Institute, College Station Texas.
2019	Senior member, Institute of Industrial and Systems Engineering (IISE)
2018	Member & Research Faculty Affiliate, Texas A&M Energy Institute, Texas A&M University, College Station Texas.
2011	Endowed Pinson Chair, Associate Professor Honorary Academic Appointment (two-yeas term). San Jose State University, San Jose California.
2010	Merritt A. Williamson Best Paper Award American Society of Engineering Management (ASEM)