

Curriculum Vitae

Andrea M. Graham, Ph.D.

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EDUCATION

Doctor of Philosophy	Industrial Engineering (2012) University of Texas at Arlington, Arlington, TX
Master of Science	Technology Management (2004) Stevens Institute of Technology, Hoboken, NJ
Bachelor of Science	Mechanical Engineering (1995) Tuskegee University, Tuskegee, Alabama

PROFESSIONAL APPOINTMENTS/EMPLOYMENT

A. Academia

Department Head, Department of Engineering and Technology, Texas A&M University-Commerce, Sept. 2018-Present

Interim Department Head, Department of Engineering and Technology, Texas A&M University-Commerce, Aug. 2016- Sept. 2018

Associate Professor, Department of Engineering and Technology, Texas A&M University - Commerce, Sept. 2018-Present

Tenure-Track Assistant Professor, Department of Engineering and Technology, Texas A&M University - Commerce, Aug. 2013- May 2018

Adjunct Professor, Department of Industrial and Manufacturing Systems Engineering, University of Texas at Arlington, 2012-2013

B. Industry (Private/Public Sector)

Senior Technical Support Engineer, AT&T Corporation, 1996- 2004

Manufacturing Process Engineer, Pratt & Whitney Aircraft, 1992-1994

RESEARCH INTERESTS AND EXPERTISE

Supply Chain and Logistics, Transportation Modeling and Optimization, Engineering Education, STEM Education, Undergraduate Recruitment and Retention

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MENTORING

Undergraduate Student Mentorship

2016-2017 Viktoriia Tabeleva, Undergraduate Honors Thesis
 “Campus-Wide Sustainability at Texas A&M University-Commerce

GRANTS

Completed Grants

2017 - The Texas Higher Education Coordinating Board(THECB) Engineering Summer Program for middle school students
Role: Principal Investigator
Amount: \$11,727

2016 - The Texas Higher Education Coordinating Board(THECB) Engineering Summer Program for middle school students
Role: Principal Investigator
Amount: \$12,900

2015 - The Texas Higher Education Coordinating Board(THECB) Engineering Summer Program for middle school students
Role: Principal Investigator
Amount: \$13,998

Submitted but not Funded Grant

2019 – National Science Foundation S-STEM Grant (Increasing Women in Engineering and Computer Science)
Role: Principal Investigator
Amount: \$998,362

2018- Governor’s Summer Merit Program
Role: Principal Investigator
Amount: \$100,000
Grant Sponsor: Texas Workforce Commission
Maestro Proposal # 1901125
Grant focused on offering summer camps to introduce engineering and computer science

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2018 - TAMUC Summer Camp Code for Girls

Role: Co –Principal Investigator

PI: Sang Suh

Amount: \$57, 178

Grant Sponsor: Texas Workforce Commission

Maestro Proposal #1902737

2018- Project PRAISE: Preparing Rural Algebra teachers with interventions, Supports, and Evidence-based practices

Role: Consultant

PI: Brittany Hott

Amount: \$406,892

Grant Sponsor: Greater Texas Foundation

Maestro Proposal #1902138

2015 – American Honda Foundation Grant promoting youth education in STEM fields.

Role: Co-Principal Investigator

Amount: \$75,000

PUBLICATIONS AND PRESENTATIONS

Peer-Reviewed

- 2017** **Graham, A.** “ABET Self-Study Report for the Bachelor of Science in Industrial Engineering at Texas A&M University Commerce”
- 2017** **Graham, A.** & Kim, Yoon Duk, “ABET Self-Study Report for the Bachelor of Science in Construction Engineering at Texas A&M University Commerce”
- 2013** **Graham, A.** & Rogers, J., “Scenario Analysis: Evaluating the Sustainability Impacts of Freight Transportation Networks”, Institute of Industrial Engineers Conference Proceedings.
- 2013** **Graham, A.,** Rogers, J. & Sattler, Melanie. “Assessing Life Cycle Sustainability in Engineering Economics”, Institute of Industrial Engineers Conference Proceedings.
- 2012** Chen, Victoria; Rogers, K. Jamie; **Graham, Andrea;** Dickson, John; Mattingly, Stephen; Sattler, Melanie; Weatherton, Yvette Pearson, "Sustainable Industrial Engineering Modules." American Society for Engineering Education Annual Conference and Exposition.
- 2012** Rogers, K. Jamie; Sattler, Melanie; **Graham, Andrea;** Mattingly, Stephen. “Life Cycle Sustainability Economics.” American Society for Engineering Education Annual Conference and Exposition.
- 2012** **Graham, A.** & Rogers, J., “Evaluation of Freight Transportation Productivity Data Collection Methods and Reliability”, Institute of Industrial Engineers Conference Proceedings.

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- 2011** **Graham, A. & Rogers, J.,"** Identification of Supplier Risk Assessment Tools under Economic Uncertainty", Institute of Industrial Engineers Conference Proceedings.
- 2011** **Graham, A., Rogers, J. "**Technology Innovation Risk Mitigation and Organizational Strategy: A Balanced Framework for Technology Managers", Portland International Center for Management of Engineering and Technology Conference Proceedings.

Work in Progress

- "Exploring First Year Students' Perceptions and Attitudes towards Engineering at Texas A&M University-Commerce." Planned submission to *Journal of Engineering Education*, 2020
- "Engineering Summer Program for middle school girls: Predictors of program impact on engineering knowledge and confidence." Planned submission to *Journal of Engineering Education*, 2020.
- "Creating Synergies that Drive Successful Implementation of Emerging Technology in Freight Transportation" Planned submission to *Journal of Supply Chain Management*, 2020.
- "Measuring Resilience in a Global Multimodal Transportation Network." Planned submission to *Journal of Supply Chain Management*, 2020
- "Assessing the adverse of effects of Six Sigma on emerging technologies." Planned submission to International Conference on Industrial Engineering Technology Management to be held April, 2020

Conference Presentations/Invited Talks

- April 2017** "Breaking Down Barriers for Women in Engineering", International Conference on Industrial Engineering and Technology Management (IC-IETM), Dallas, TX
- May 2013** "Assessing Life Cycle Sustainability in Engineering Economics Uncertainty", Institute of Industrial Engineers Conference Proceedings. San Juan, PR
- May 2013** "Time Study and Work Measurement: Impacts on Six Sigma Projects", Institute of Industrial Engineers Conference, San Juan, PR
- May 2013** "Scenario Analysis Evaluating the Sustainability Impacts of Freight Transportation Networks", Institute of Industrial Engineers Conference Proceedings. San Juan, PR
- June 2012** "Sustainable Industrial Engineering Modules." American Society for Engineering Education Annual Conference and Exposition. San Antonio, TX

SCHOLARLY AND CREATIVE ACTIVITY

- 2017-2018 Associate Editor of the International Supply Chain Technology Journal (ISCTJ) Advisory Board

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- 2016-2017 Associate Editor of the International Supply Chain Technology Journal (ISCTJ) Advisory Board
- February 2015, Peer Reviewer. *Journal of Cleaner Production*
- Scientific Committee Member, International Conference on Industrial Engineering and Technology Management (IC-IETM), April 8-7, 2017, Dallas, TX
- Institute of Industrial Engineering Annual Research Conference Invited Track Chair for Logistics and Supply Chain Division, May 2014
- NSF Proposal Submission Workshop held May 22, 2014 at University of Texas at Arlington
- ARENA Software- Professor Academic Symposium, July 14-18, 2014 , Austin, TX
- FYEE Conference Attendee and Session Chair, August 6-8, 2014 , College Station, TX
- Texas A&M University sponsored Mid Years Engineering Conference (MYEEC), Texas A&M University, College Station, TX, March 22-24, 2015
- First Year Engineering Experience Conference (FYEE) attendee, Virginia Tech, Roanoke, VA, August 2-5, 2015
- Texas A&M Engineering Experiment Station Meeting (TEES), Weslaco Research Center, May 18-20 2015
- Member of creative group led by Dr. Betty Block writing grant for NSF ADVANCE Grant, 2016.

SERVICE

University

- University Strategic Planning Committee- Spring 2019
- Student Service Fees Committee – Appointment Spring 2019-Spring 2021
- Chair, Council of Academic Department Heads- Fall 2018-Fall 2019
- Search Committee Member: Career Services Career Coach (Summer 2019)
- Texas Women of Higher Education Institutional Representative- 2018-present
- Presidential Search Advisory Board, Spring-Summer 2018. Search resulted in the hiring of Dr. Mark Rudin.
- Career Coach Search Committee, Spring 2018. Search resulted in the hiring of Shanna Florence and Trevor McCray
- Dean Search Committee member for College of Science and Engineering, spring 2014. Search resulted in the hiring of current dean, Dr. Brent Donham.
- University Climate Study Focus Group contributor. Study conducted on Nov. 2, 2015 Rankin and Associates
- Serving on Dissertation Committee for Samuel Ogbonna in the College of Education. Dissertation proposal successfully defended on March 18, 2016. Dr. Nate Templeton, Dissertation Advisor.
- Graduate Council Representative for Proposal Defense (May 5, 2015) for Dawn Harris entitled, “ The Impact of Building Leadership Capacity on Campus Culture”. Dr. Kris Kemp-Graham, Dissertation Advisor.
- Invited panel speaker for Department of Residential Living and Learning’s Sophomore Year Experience program, April 29, 2015.
- Honors College Thesis Student Advisor for Viktoriia Tabaleva. Student’s topic of research: Campus-Wide Sustainability Initiative at TAMU-C.
- Undergraduate Academic Appeals Committee Chair (August 2016-Present)
- Undergraduate Academic Appeals Committee (2015-2016)

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- University Department Head monthly meetings

College

- Search Committee Member: Department Head for Computer Science
- College of Science and Engineering Leadership Council
- Representative for College of Science and Engineering on Digital ePortfolio Task Force. Development of online tool for Faculty Tenure and Promotion. Tool is currently in production and testing phase. (2015-2016)

Department

- Served as recruiter for the Hunt County High Schools College Fair, Sept. 20, 2013.
- MANE Event Preview Day speaker, Oct 19, 2013
- Lion's Pride BEST Presentation, Stone MS, Paris, TX, Dec. 12, 2013. Spoke with Robotics class about the field of Industrial Engineering.
- Industrial Engineering academic faculty advisor (2014-present)
- Institute of Industrial Engineers Student Chapter Faculty Advisor (2015)
- Dallas County Community College recruiting event, April 4, 2014
- Prosper High School recruiting event, Sept 8, 2014
- Mane Event Preview Day speaker, Oct. 18, 2014
- Lead Technology Management Undergraduate Program faculty member (started Fall 2015)
- Technology Management Graduate Program committee member (2014-present)
- Mane Event Preview Day speaker, Spring and Fall Sessions 2015
- Richland College Engineering Technology and Manufacturing Advisory Committee Member (2015-2016)
- Speaker for Third Annual Engineering Roundtable at Northeast Texas Community College, April 1, 2016.
- Department of Engineering and Technology Scholarship Committee (2015-2016)
- Faculty Search Committee member for Department of Engineering and Technology.
 - **Spring 2015:** Industrial Engineering tenure track faculty search: Resulted in the hiring of a new tenure track Industrial Engineering faculty member
 - **Spring 2015:** Engineering and Technology tenure track faculty member search: Resulted in a failed search
 - **Fall 2015:** Technology Management tenure track faculty search. Resulted in the hiring of a new tenure track Industrial Engineering faculty member
 - **Spring 2016:** Industrial Engineering tenure track faculty search: Resulted in the hiring of a new tenure track Industrial Engineering faculty member
- Industrial Engineering Learning Outcome Assessment Committee – Institutional Effectiveness
- Institutional Effective Author for Industrial Engineering and BS Technology Management programs
- ABET Coordinator, Industrial and Construction Engineering
- Faculty Search Committee, Technology Management: Resulted in hiring of tenure track Assistant Professor
- New/Transfer Students Orientation
- MANE Event for Department of Engineering & Technology , Spring and Fall 2016
- Academic Advisor for Technology Management undergraduate majors (Spring 2016)
- Academic Advisor for Industrial Engineering majors
- Hosted Industrial Engineering Industrial Advisory Board meeting (Dec. 2016)
- Lead Technology Management Undergraduate Program faculty member (2015-2016)

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- Technology Management Graduate Program committee member
- Graduate Council Representative for Proposal Defense (Oct. 17, 2016)
- Representative for College of Science and Engineering on Digation ePortfolio Task Force
- Northeast Texas Community College Engineering Roundtable participant (April 2016)
- Richland College Engineering Technology and Manufacturing Advisory Committee
- Honor's Thesis Student Advisor
- Coordinated and hosted tour day for Bryan Adam High School students
- Jerry Parish-Emeritus designation approval

Service to and Evidence of Involvement in the Community

- Prosper ISD STEM Advisory Council
- Prosper ISD Strategic Planning Action Team, Member
- Sulphur Springs High School Career & Technical Education (CTE) Advisory Committee. Serves as academic consultant
- Recognized by Commerce ISD for hosting Engineering Summer Program at TAMU-C.
- Black History Month keynote speaker at Mount Hebron Mission Baptist Church, February, 2014.

Service to and Evidence of Membership and Involvement in Professional Associations

- Institute of Industrial Engineers (IIE), Student Chapter Faculty Advisor
- American Society of Engineering Education (ASEE), Member
- Alpha Pi Mu, Member
- Phi Kappa Phi, Member
- SCNext (Supply Chain young professionals group), Certified Trainer and Instructor of Radio Frequency Identification(RFID) Technology Implementation

AWARDS AND HONORS

2017	Professor of the Year – Hunt Hopkins County African American Leadership Conference
2016	Tech Titan of the Future –University Finalist for Engineering Summer Program for Girls
2011-2012	Alfred P. Sloan Ph.D. Scholar
2008-2010	STEM Doctoral Fellowship
2006	SREB Doctoral Scholar Fellowship

PROFESSIONAL DEVELOPMENT AND RECOGNITION

- **Texas Academic Leadership Academy Certification, 2019**
- **Certified Lean Six Sigma Master Black Belt (Cert # 1904017902), 2019**
- Institute on Teaching and Mentoring hosted by The Compact on Faculty Diversity
- Workshop on Process for Completing a Grant Application given by ORSP
- Rockwell ARENA Simulation Software Training- July 14-18, 2014
- NSF Proposal Submission Workshop held May 22, 2014 at University of Texas at Arlington
- ***Recognized by Commerce ISD School Board for the work done with the Commerce Middle School girls who attended the Engineering Summer Camp on June 8-12, 2015, local/regional, research and service
- Recognized by Research and Sponsored Program as a 2015 Investigator. November 17, 2015, local, research
- ***Professor of the Year, Hunt Hopkins County African American Conference, February 2017

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- ***Tech Titan of the Future –University Finalist for Engineering Summer Program for Girls
- PIVETS² Conference, focus on transfer students (2017)
- ABET Outcome Assessment Training (2016)
- Department Head Training (2017)
- Texas Academic Leadership Academy, Inaugural Class

PROFESSIONAL MEMBERSHIPS

International Supply Chain Education Alliance, Certified RFID Trainer

Institute of Industrial Engineering, Member, Track Chair

Society of Women Engineers, Professional Member

Institute of Industrial and Systems Engineering, Senior Member

Alpha Pi Mu, Member

Phi Kappa Phi National Honor Society, Member