



Burchan Aydin, Ph.D.

Academic Department: Engineering and Technology

Academic Ranking: Assistant Professor

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EDUCATION

- Ph.D. Industrial Engineering, Texas Tech University, 2014.
- M.A.A. Organizational Development, University of the Incarnate Word, 2008.
- B.S. Industrial Engineering, Middle East Technical University, 2005

TEACHING EXPERIENCE

- *2015 – Present*, Assistant Professor, Engineering and Technology, Texas A&M University, Commerce
 - *MS. Technology Management Program*
 - *B.S Technology Management Program*
 - *B.S Industrial Engineering Sophomore Courses*
 - *B.S. Construction Engineering Sophomore Courses*
 - *B.S Electrical Engineering Sophomore Courses*
- *Jan- June 2015*, Adjunct Faculty, Engineering and Technology, Texas A&M University, Commerce.
- *2010-2014*, Teaching and Research Assistant, Construction Engineering, Texas Tech University
- *Jan-Aug 2010*, Research Assistant, Industrial Engineering, Texas Tech University.
- *Jan-May 2009*, Teaching Assistant, Industrial Engineering, Texas Tech University

RESEARCH

Academic Research Interests: Dr. Aydin primarily focuses on emerging (disruptive) technologies from both technical and non-technical research perspectives. Sustainable development is his secondary research focus.

Ongoing Research Projects:

- **Unmanned Air Systems Assisted Wildfire Firefighting**

- **Grant:** Awarded \$2,500 by Texas A&M University Engineering Experimentation Station (TEES) for the fiscal years 2017-18.
- **Major Goals:** Decreasing fatality rates for building fires, assisting firefighters for mitigating wildfires, increasing firefighter safety, decreasing economic losses due to fires
- **Live Swarm Remote Sensing of Unmanned Air Vehicles**
 - **Grant:** Awarded \$2,500 by Texas A&M University Engineering Experimentation Station (TEES) for the fiscal years 2018-19.

Refereed Articles

- Aydin, B. (2019). Public acceptance of drones: Knowledge, attitudes, and practice. *Technology in Society*, doi: 10.1016/j.techsoc.2019.101180.
- Aydin, B., Yeon, J., Oh, E (2019). A Pilot Study of UAVs in the Construction Sector: Knowledge, Attitudes, and Practice. In IIE Annual Conference Proceedings. Institute of Industrial and Systems Engineers.
- Aydin, B., Selvi, E., Tao, J., Starek, M. (2019). Use of Fire-Extinguishing Balls for a Conceptual System of Drone-Assisted Wildfire Fighting. *Drones* 3(1), pp. 17.
- Aydin, B., Kim, S., Harp, D., & Ojemuyiwa, S. (2018, May). Designing an Automated Green Roof System. In IIE Annual Conference Proceedings. Institute of Industrial and Systems Engineers.
- Aydin, B. (2018). Public Acceptance of Drones: Knowledge, Attitudes, and Practice. *Technology in Society*. Elsevier (Under Revision).
- Darwish, M., Aydin, B., Basora, Z. (2016). Approaches to Teaching Sustainable Development and Green Construction: Guest Experts & Fieldtrips. American Society for Engineering Education, GSW 2016.
- Aydin, B., Darwish, M., Selvi, E., (2016). State of the Art Matrix Analysis for Usability Evaluation of Learning Management Systems. *Computers in Education Journal of American Society for Engineering Education*.
- Aydin, B., & Moler, P. (2016). Cost Analysis of Open Source versus Proprietary Learning Management Systems. Proceedings of the International Conference of Technology Management (ICTM).
- Aydin, B. (2014). Development of a Decision Tool for Cost Justification of Usability. Dissertation. Texas Tech University.
- Aydin, B. & Beruvides M. G. (2014). Development of a Decision Tool for Cost Justification of Usability. *International Journal of Information Technology and Business Management*, Vol. 28, pp 45 - 73.
- Aydin, B., Beruvides, M. G. (2014). Development of a Decision Tool for Usability Cost Justification. Proceedings of the 2014 Industrial and Systems Engineering Research Conference.
- Aydin, B., Palikhe, H. and Beruvides, M. G. The Impact of Usability on the Cost of Quality. American Society of Engineering Management 2012 International Annual Conference Proceedings, Virginia Beach, VA, 2012.
- Aydin, B., Millet, B., and Beruvides, M. G. The State-Of-The-Art Matrix Analysis for Cost-Justification of Usability Research. American Society of Engineering Management 2011 International Annual Conference Proceedings, Lubbock, TX, 2011.
- Millet, B., and Aydin, B. Empirical Evaluation of Text Entry Performance of the Apple iPhone and a Hard-key Mini QWERTY Keyboard Smartphone. International Society for Occupational Ergonomics, ISOES 2010 Annual Conference Proceedings, Tempe, AZ, 2010.

Abstracts, Presentations and Workshops:

- Aydin, B. (2016). Sustainability Analysis for an Emerging Technology: Drones. Presentation at Association of Technology Management and Applied Engineering (ATMAE) Conference.
- Presented at Engineering STEM Summer Camp which is organized by Dr. Andrea Graham. (June 2017).

- Workshop Title: Introduction to drones for middle school students and building drones from LEGOs.
- Presented at STEAM WORKSHOP, 2017 at Mesquite Center:
 - Workshop Title: Drone Programming Basics for STEM students
- Darwish, M., Basora, Z., & Aydin, B. (2017). Preparing the Construction Industry for Climate Change through Resilience and Adaptation. Abstract. International Sustainable Buildings Symposium ISBS 2017.

Mentored Student Research Posters

- **Title:** An Assistant to Firefighting: Drone Design
 - Student Poster Presentation at National Conference on Undergraduate Research (NCUR 2017)
 - Authors: Nicole Buczkowski, Christian Carter, Harrison Clark, Kyle Crews, Michelle Espinal, and Julie Summers (Jacksonville University)
 - Faculty Mentors: Emre Selvi (Jacksonville University, Engineering Department) and Burchan Aydin (Texas A&M University - Commerce, Department of Engineering and Technology)
- **Title:** A Comprehensive Analysis on Fire Extinguishing Supplementary Tools
 - International Conference of Industrial Engineering and Technology Management (IC-IETM 2017) (Sub-division: Safety)
 - Authors: 2 IE majors, and 2 MS TMGT students Engineering and Technology, Texas A&M University - Commerce
 - Faculty Mentor: Burchan Aydin

Creative Scholarly Research Based Activities:

- Chair of the **1st International Research Conference of Industrial Engineering and Technology Management (IC-IETM)**.
 - Location: University Center Dallas
 - Date: April, 2017
- Chair of the **2nd International Research Conference of Industrial Engineering and Technology Management (IC-IETM)**
 - Location: Manhattan, New York
 - Date: August 2018.
- Co-chair and International Executive Board for:
 - **International Sustainable Buildings Symposium-ISBS** 2015, 2016, 2017, 2018, 2019
- Reviewer for:
 - American Society for Engineering Education (ASEE) Annual Conference Proceedings
 - Association of Technology Management and Applied Engineering (ATMAE) Conferences Abstracts
- Judge for Annual Federation Graduate Student Research Symposium in Denton, Texas on Friday, March 31, 2017.

GRANTS

- Principal Investigator for

- Unmanned Air Systems Assisting Fire Fighting
 - Funding Source: TEES, Texas A&M Engineering Experiment Station.
 - Funding Amount \$2,500, 2017-2018 Fiscal year
- Principal Investigator for
 - Live Swarm Remote Sensing of Unmanned Air Vehicles
 - Funding Source: TEES, Texas A&M Engineering Experiment Station.
 - Funding Amount \$2,500, 2018-2019 Fiscal year
- Spring 2017 Faculty Development Grant, A&M Commerce.
Award: \$300

LEADERSHIP EXPERIENCE

- Faculty Advisors for:
 - Alpha Pi Mu, the Industrial Engineering Honor Society, A&M - Commerce
 - ATMAE, Association of Technology Management and Applied Engineering Graduate Student Chapter, Texas A&M University - Commerce
- Chair for:
 - International Conference of Industrial Engineering and Technology Management 2017, IC-IETM, Dallas, TX
- Participated in Organizing:
 - American Society for Engineering Management (ASEM) Conference in Lubbock, TX.
- International Executive Board for:
 - International Sustainable Buildings Symposium-ISBS 2015 to present
- Toastmasters International Club 884: Competent Communicator Level

PROFESSIONAL TRAININGS AND WORKSHOPS

- Professional License:
 - United States Department of Transportation, Federal Aviation Administration F.A.A., REMOTE PILOT for Small Unmanned Air Systems
 - Certificate Number: 4061218
 - Date of Issue: Oct 14, 2017
- Certifications:
 - Completion of Teachers Take Flight Workshop
 - "DaVinci Challenge: Build a Drone for Education"
 - Location: Foxcroft School, Middleburg, Virginia
 - Date: August 2017
 - Completion of Webinar:
 - "Drones on Campus: Policies to Achieve Institutional Compliance and Minimize Risk"
 - Organizer: paperclip communications
 - Date: September 2017
 - Completion of Webinar:
 - "Creating a Timeline for Developing & Submitting a Grant and Crafting Specific Aims or Objectives"
 - Organizer: Texas A&M Engineering Experiment Station (TEES)
 - Date: November 2017
- Six Sigma White Belt Certificate of Achievement, Aveta Business Institute, 2016.
- Protection of Human Subjects Training, Texas A&M University - Commerce, 2015.
- Responsible Conduct of Research, Texas A&M University - Commerce, 2015.
- Student Organization Advisor Training, Texas A&M University - Commerce, 2015.

- OSHA Construction Safety and Health certificate, 2013.
- Business Analyst Training, PellucidTech, 2013.
- Certificate of Completion for Introduction to Web and E-Commerce User Experience Design, 2013.
- Certificate of Completion for Web Usability Made Simple, 2013.
- Competent Communicator, Toastmasters.
- 11th Annual John M. Burns Conference on the Scholarship of Teaching and Learning, 2012.
- Dreamweaver workshop, ATLC, Texas Tech University, 2012.
- Expression Web workshop, ATLC, Texas Tech University, 2012.
- Project Management Certificate, Holland and Davis LLC., 2006.

HONORS AND PROFESSIONAL MEMBERSHIPS

- A&M Commerce Faculty Senate Award for Fearless Investigation, 2018.
- Member, Alpha-Pi-Mu - The Industrial Engineering Honor Society.
- Member, Tau-Beta-Pi - The Engineering Honor Society.
- Member, ASEE, American Society for Engineering Management.
- Member, IISE- Institute of Industrial and Systems Engineering
- Member, ATMAE, Association of Technology Management and Applied Engineering