Henry Griffith, PhD, MBA

Education

- **Ph.D. in Electrical Engineering** – Michigan State University, East Lansing, MI
- **M.S. in Management Science** – University of Dayton, Dayton, OH
- **M.B.A. – Project Management Focus** – Wright State University, Dayton, OH
- **B.S. in Electrical Engineering** – Wright State University, Dayton, OH

Professional Experience

Department Chair, Mathematics, Architecture, Physics, and Engineering, San Antonio College (SAC), San Antonio, TX ▪ December 2022 – Present

- Recently promoted to Chair of Mathematics, Architecture, Physics, and Engineering Programs

Assistant Professor and Engineering Program Coordinator, Engineering Program, San Antonio College (SAC), San Antonio, TX ▪ March 2022 – November 2022

- Redesigned and instructed all active courses within the ENGR rubric (*Introduction to Engineering, Engineering Graphics, Statics, Dynamics, and Programming for Engineers*) within the first 6 months of employment
- Restructured course scheduling workflow to fully leverage available course catalog and schedule offerings using student survey feedback. Initial implementation resulted in no canceled classes for Fall 2022 and near-capacity enrollments in each section
- Lead efforts to integrate emerging technologies (i.e.: artificial intelligence, mixed reality, etc.) within the ENGR academic portfolio. Developing an occupational skills award pathway in engineering technology, along with microcredentials in data engineering and mixed reality (Fall 2022)
- Lead external funding pursuits from corporate and government sponsors to support strategic initiatives. Received $18,000 through Google's exploreCSR program (first PI from a two-year institution to be awarded under this program), ~ $10,000 in VR equipment donations (20 Oculus Headsets) from Meta (formerly Facebook), and $6,000 from TensorFlow for building summer programming in machine learning.
- Revamped extracurricular active learning programming portfolio, increasing number of nationally recognized project opportunities available to students (Fall 2022 Portfolio: NASA SUITS competition, NASA Innovation and Tech Transfer Idea Competition, Dept. of Energy Solar Cup) while drastically reducing associated budget requirements
- Revitalized engineering undergraduate (UG) research portfolio through collaboration with local University partners to ensure adherence to nationally recognized best practices. Initial efforts resulted in a student manuscript being accepted at a major international conference (IEEE ICCE Asia 2022), along with considerable student participation in traditional UG research outlets (i.e.: local symposia, SACNAS, etc.)
- Maintain an active research portfolio in partnership with local University collaborators focused on providing University-level research opportunities for SAC students. Published 6 manuscripts since joining SAC (2 journal papers, 4 IEEE conference proceedings), with 2 additional publications under review. Papers have provided co-authorship opportunities for 4 UG students. Summer 2022 research group included 7 Alamo College District students (SAC – 4, NVC – 3).
- Initiated programming to provide students with exposure to technology-oriented entrepreneurship pathways, resulting in the selection of a SAC team as finalists in the 2022 AACC/NSF Community College Innovation Challenge (CCIC)

- Implemented course-based research experiences within the *Introduction to Engineering* and *Engineering Graphics* course under support from Department of Education's Project Build Grant in partnership with AltBionics (San Antonio-based startup in smart prosthetics) (Fall 2022)
- Created and adopted open educational resources for *Introduction to Engineering and Programming for Engineers* courses (Initial implementation in Summer 2022)
- Provided faculty leadership to stand up the first Google Developer Student Club (GDSC) within the greater San Antonio region at SAC. Serve as SAC GDSC faculty advisor, and faculty co-advisor to Society of Women Engineers student club.
- Provide service to the College through committee service (EcoCentro Director Hiring Committee, etc.)
- Serve as SAC Principal Investigator for NSF CIMA LSAMP Grant (Fall 2022)

Lecturer (Part Time) - Department of Electrical and Computer Engineering, University of Texas at San Antonio, San Antonio, TX ▪ 2021 - Present

- Redesigned EE 1322 – *Introduction to Electrical and Computer Engineering* course to enhance student success and improve retention metrics, particularly amongst historically marginalized individuals. Efforts received support from NVIDIA, Google, UTSA's College of Engineering and Integrated Design, and UTSA's Office of Academic Innovation
- Serve as the primary instructor for EE 1322 beginning in F21. Taught two sections during initial redesigned implementation (1 F2F, 1 online asynchronous) in F21 with total enrollment of ~ 150 students. Reduced DFW rate to 12.6% in F21 across both sections (F20 benchmark of ~25%).
- Supervise research of undergraduate and graduate students in the general areas of artificial intelligence and edge computing. Serve as faculty advisor of UG students as part of College of Engineering and Integrated Design's Undergraduate Research Experience Program (AY 22 – 2 students, AY 21 – 2 students)
- Serve as faculty advisor for senior design projects (AY 21 - 1 project in ECE, 1 project in ME)
- Developed novel programming to accelerate student access to undergraduate research and internship experiences. Efforts included the development of an innovative near-peer undergraduate mentoring program, along with extracurricular training opportunities to build students' skills in emerging technology domains (i.e.: programming, artificial intelligence, etc.)
- Taught two online asynchronous sections of EE 4113 during Spring 2021 semester. Improved course lecture resources to support the online asynchronous delivery of material

Technology Licensing Associate, Office of Commercialization and Innovation (OCI), University of Texas at San Antonio, San Antonio, TX ▪ 2021 – 2022

- Responsible for commercializing the portfolio of University-owned intellectual property (IP) in engineering, data analytics, computer science, and physics
- Operational responsibilities included performing patentability and commercialization assessments of invention disclosures, making go/no-go decisions on subsequent investments, and exploring commercialization pathways (licensing, new ventures, etc.) for existing IP
- Strategic responsibilities included leading OCI efforts in supporting the development of the tech start-up ecosystem in the greater San Antonio area and growing commercialization activity at UTSA in relevant domains through faculty and student outreach initiatives

Associate Operations Director: MATRIX AI Consortium for Human-Well Being, University of Texas at San Antonio, San Antonio, TX ▪ 2021

- Promoted with expanded responsibilities to provide leadership of emerging workforce development and student engagement initiatives within MATRIX. Previous operational responsibilities (leading marketing, accounting, HR, and research operation initiatives) were retained through this transition.

Research Program Coordinator: MATRIX AI Consortium for Human-Well Being –University of Texas at San Antonio, San Antonio, TX ▪ 2020 – 2021

- Created standardized operating procedures for ongoing Consortium management processes, including HR, accounting (budget reconciliations, expense reimbursements, procurement, etc.), data management, and customer relationship management
- Initiated social media accounts for Consortium and established corresponding social media strategy and operational protocol
- Served as project manager for the design of initial Consortium facilities and procurement of on-premise computing resources
- Served as internal project manager for the Consortium's website design project
- Designed the Consortium's AI DIY facility, identifying core functionality and selecting/procuring corresponding instrumentation and sensor resources
- Monitored financial activity for all affiliated research projects and cost centers. Maintained internal purchasing and payroll records and reconciled against monthly financial reports.
- Supported proposal development activities for the Consortium, identifying new funding opportunities and providing technical and operational guidance for proposal preparation efforts. Prepared budgets and corresponding justifications for new research proposals.
- Provided financial oversight for all matters related to the NuAI lab, including travel, HR, procurement, and expense reimbursement
- Served as primary support coordinator for the Consortium's weekly seminar series and ongoing training events

Program Faculty / Research Fellow – Department of Computer Science, Texas State University, San Marcos, TX ▪ 2019 – 2020

- Served as technical lead on multiple research projects applying machine learning to eye movement sensing. Primary focus was on the translation of eye tracking technology to commercial head mounted devices for virtual and augmented reality applications under funding from Google, Facebook, and NSF.
- Prepared academic manuscripts for submission to relevant conferences and journals, resulting in 10 publications (7 first author) in leading outlets (Nature's Scientific Data, IEEE T-BIOM, ACM ETRA, COGAIN, IEEE ICCCV, etc.)
- Supervised all graduate and undergraduate research students within the lab (~ 8 total), providing technical guidance and professional mentorship. Provided formal assessments of student performance to project PI.
- Prepared technical content for external funding applications to public and private agencies. Efforts resulted in successful funding acquisition from NSF, Facebook, and Google.
- Supported efforts to protect the intellectual property of the lab by providing consulting services to contracted IP attorneys

University Distinguished Fellow – Department of Electrical and Computer Engineering, Michigan State University, East Lansing, MI ▪ 2015 – 2018

- Conducted research developing ubiquitous smart sensing technologies for various pervasive healthcare applications (sedentary activity monitoring, in-home rehabilitation support, contactless activity classification, automated hydration monitoring, etc.). Research resulted in the development of an attachable IoT sensor for hydration monitoring which is currently being commercialized by a start-up company.
- Produced 15 first-author publications in top conferences and journals (IEEE WoWMoM, EMBC, IPCC, MDPI Sensors, etc.).
- Served as primary interface with Institutional Research Board for two projects, developing application material, monitoring approval workflow, and facilitating renewal applications where appropriate.

- Served as primary administrator for an externally funded project requiring data collection from 84 individuals. Responsibilities included monitoring and accounting for subject compensation, developing and implementing scheduling protocol, developing/maintaining consent forms, etc.

Technology Transfer Intern (Part Time) – MSU Technologies, Michigan State University, East Lansing, MI ▪ 2016 – 2018

- Performed preliminary screening of invention disclosures by University employees. Analysis included performing market research of commercialization potential (using BCC Research and other market research tools), along with screening competitive patent literature (using Google Scholar, PatSnap, etc.). Projects were focused in smart materials, medical imaging, sensors, and autonomous navigation.
- Identified various improvement opportunities within disclosure screening workflow. Using these recommendations, redesigned screening report and presentation templates.

Process Improvement Engineer – WinSupply Inc., Dayton, OH ▪ 2013 – 2015

- Developed equity valuation tools as a direct report to the company's Chief Financial Officer.
- Developed automated capital budgeting tools to support procurement processes
- Applied lean six-sigma principles to improve efficiency of various business functions, including Accounts Payable and Purchasing.

Adjunct Faculty (Part Time) – Wright State University, College of Engineering, Dayton, OH ▪ 2013-2015

- Taught courses in engineering mathematics and mechanics while completing MBA
- Redesigned EGR 4980 course structure and material in response to recent changes in the FE exam. Efforts included preparation of new course materials corresponding to the exam outline for the Electrical and Computer Engineering concentration.
- Redesigned the Academic Advantage Program (AAP) and EGR 1980 to utilize the ALEKS Prep for Calculus module. Efforts included the development of all content modules and associated schedule coordination, as well as conducting an ALEKS training session for instructors and teaching assistants.

Instructor – Cuyahoga Community College, Cleveland, OH ▪ 2009 – 2012

- Served as a full-time instructor teaching various courses in electronics engineering technology (EET) and mathematics, with a particular focus on developmental coursework.
- Provided service to the college in support of reaccreditation efforts and various continuous improvement activities.

RF Engineer – Technology Service Corporation, Bloomington, IN ▪ 2007 – 2009

- Provided engineering services in support of United States Navy legacy radar systems. Activities included utilizing computational electromagnetic simulation and measurement tools to characterize the effects of environmental degradation on slotted waveguide array performance, as well as the design and fabrication of an ultra-low noise calibration source for the AEGIS radar system.

Electronics Engineer – Air Force Research Laboratory – Sensors Directorate, Wright Patterson Air Force Base, Dayton, OH ▪ 2004 – 2007

- Conducted research in the design, development, and characterization of wideband planar antennas. Activities included development of closed form analytical models, design and optimization using computational electromagnetics software packages, as well as the fabrication and characterization of prototype antennas in both near and compact far-field antenna ranges.

Grants

- Co-PI - *CIMA LSAMP Alliance*, National Science Foundation, October 2022 – Present - $1.5M
- PI - *Increasing Research Efficacy amongst Historically Marginalized Individuals through Cross-Institutional Peer Mentorship*, Google's 2022 exploreCSR Program, October 2022 - $18k
- PI – *Implementing an Introduction to Edge AI Module in a Summer Camp Program,* TensorFlow Supplemental Funding through exploreCSR, November 2022 - $6k
- PI – *Development of Virtual Reality Microcredentials at a Two-Year HSI*, Meta, September 2022 - $10k (hardware donation)
- PI - *Accelerating Undergraduate Research Readiness through Peer Mentorship and AI Training*, TensorFlow/Google Research, December 2021 - $6.5k
- PI - *Transforming the Electrical and Computer Engineering Introductory Course for Online and Hybrid Delivery*, UTSA Academic Innovation's Teaching and Learning Reimagined Program, December 2021 -$5k
- PI – *Enhancing the Success of Freshman ECE Students through Accelerated Exposure to Emerging Technologies and Entrepreneurship,* UTSA College of Engineering and Integrated Design's Incorporating In-Demand Technical and Professional Skills into CEID's Curriculum, December 2021 - $5k
- Co-PI (50%)– *Improving the engagement and self-efficacy of latinx learners through a redesigned entry point ECE course*, Google's 2021 exploreCSR Program, October 2021 - $18k
- PI – *Enhancing Persistence by Accelerating Exposure to Emerging Technologies*, NVIDIA's 2021 Academic Hardware Grant Program, September 2021 - $1.2k (hardware donation)
- PI - Matching Funding for NVIDIA Academic Hardware Grant funding from UTSA's College of Engineering and Integrated Design, September 2021 - $1k

Teaching Professional Development/Certifications

- Applying the QM Rubric, 6th Edition, Quality Matters, 2022
- Effective Online Teaching Practices, Association of College and University Educators (ACUE), 2021-2022
- Inclusive Teaching for Equitable Learning, ACUE, 2022
- UTSA Adobe Institute Training, 2022
- UTSA Innovation Academy Online Teaching Training, 2021

Certifications

- **Project Management Professional (PMP)** – Project Management Institute
- **Six Sigma and Operational Excellence** – University of Dayton, Dayton, OH
- **Credential in Effective College Instruction –** ACUE, June 2022
- **Inclusive Teaching for Equitable Learning –** ACUE, April 2022
- **Applying the QM Rubric – 6th Edition**, Quality Matters, July 2022

Peer-Reviewed Publications (Underlined authors are supervised undergraduate researchers)

1. **Griffith, H**., Farooq, M., and Rathore, H. (2023, January), "A Data Generation Workflow for Consensus-Based Connected Vehicle Security." 2023 IEEE International Conference on Consumer Electronics (ICCE). IEEE, 2023.
2. Lohr, D., **Griffith, H.**, and Komogortsev, O.V. **(**2022**)** Eye Know You: Metric Learning for End-to-end Biometric Authentication Using Eye Movements from a Longitudinal Dataset. *IEEE Transactions on Biometrics, Behavior, and Identity Science (T-BIOM)*
3. Roy, A., Dutta, H., **Griffith, H**., & Biswas, S. (2022). An On-Device Learning System for Estimating Liquid Consumption from Consumer-Grade Water Bottles and Its Evaluation. Sensors, 22(7), 2514.
4. West, R., Hooker, A., Rathore, H. and **Griffith, H.**, (2022, October) "Ubiquitous Multimodal Seizure Management Using Emerging Consumer Technologies." 2022 7th International Conference on Consumer Electronics - Asia (ICCE Asia). IEEE, 2022.
5. Perez, J., Muskin, J., **Griffith, H.**, and Alleyne, A. (2022, June) " Minority-serving Institution Partnerships Strengthen Underrepresented Minority Recruitment for a Research Experience for Undergraduates Program (Experience)" 2022 ASEE Annual Conference and Exposition. ASEE, 2022.
6. **Griffith, H.**, Flores, J. and Larweck, A. (2022, March) "Towards the Effective Selection of Guest Speakers within an Introductory Electrical and Computer Engineering Course." 2022 IEEE Integrated STEM Education Conference (ISEC). IEEE, 2022 (Best Paper Award)
7. **Griffith, H.**, and Griffith, A. (2022, March). "A Microcredentialing Strategy for Crowd Sourcing Support Resources within an Introductory Engineering Course." 2022 IEEE Integrated STEM Education Conference (ISEC). IEEE, 2022
8. Larweck, A., Hooker, A., and **Griffith, H**. (2022, March) "Accelerating Freshmen Engineering Students into Undergraduate Research Experiences." 2022 IEEE Integrated STEM Education Conference (ISEC). IEEE, 2022
9. **Griffith, H. K**., Lohr D., Abdulin, E. & Komogortsev, O. V. (2021). GazeBase: A Large-Scale, Multi-Stimulus, Longitudinal Eye Movement Dataset. *Scientific Data, 8(1), 1-9.*
10. **Griffith, H**., Fraser, M., Hooker, A., Boeckmann, A. (2021, December) Towards a multisensory mixed reality platform for the identification, management, and rehabilitation of sport-related concussion. In *2021 IEEE 11th International Conference on Consumer Electronics (ICCE-Berlin)*, pp. 1-4. IEEE.
11. Lohr, D., **Griffith, H.**, Aziz, S., and Komogortsev, O.V**. (**2020**)** "A Metric Learning Approach to Eye Movement Biometrics." In *2020 IEEE International Joint Conference on Biometrics (IJCB),* pp. 1-7. IEEE.
12. **Griffith, H**., & Komogortsev, O.V. (2020, June). A Shift-Based Data Augmentation Strategy for Improving Saccade Landing Point Prediction. In *ACM Symposium on Eye Tracking Research and Applications* (pp. 1-6).
13. **Griffith, H. K**., & Komogortsev, O. V. (2020, June). Texture Feature Extraction from Free-Viewing Scan Paths Using Gabor Filters with Downsampling. In *ACM Symposium on Eye Tracking Research and Applications* (pp. 1-3).
14. Katrychuk, D., **Griffith, H**., & Komogortsev, O. (2020, June). A Calibration Framework for Photosensor-based Eye-Tracking System. In *ACM Symposium on Eye Tracking Research and Applications* (pp. 1-5).
15. **Griffith, H.,** Aziz, S., & Komogortsev, O. (2020, January). Prediction of Oblique Saccade Trajectories Using Learned Velocity Profile Parameter Mappings. In *2020 10th Annual Computing and Communication Workshop and Conference (CCWC)* (pp. 18-24). IEEE.
16. **Griffith, H.**, Shi, Y., & Biswas, S. (2019). A Container-Attachable Inertial Sensor for Real-Time Hydration Tracking. *Sensors*, *19*(18), 4008.
17. **Griffith, H.**, Shi, Y., & Biswas, S. (2019). A dynamic partitioning algorithm for sip detection using a bottle-attachable IMU sensor. *Int. J. Adv. Comput. Sci. Appl*, *10*, 1-10.

18. Friedman, L., Stern, H. S., Prokopenko, V., Djanian, S., **Griffith, H. K**., & Komogortsev, O. V. (2019). Biometric Performance as a Function of Gallery Size. *Applied Sciences*, *12*(21), 11144.
19. Katrychuk, D**., Griffith, H. K**., & Komogortsev, O. V. (2019, June). Power-efficient and shift-robust eye-tracking sensor for portable VR headsets. In Proceedings of the 11th ACM Symposium on Eye Tracking Research & Applications (pp. 1-8).
20. **Griffith, H.,** Katrychuk, D., & Komogortsev, O. (2019). Assessment of shift-invariant CNN gaze mappings for PS-OG eye movement sensors. In Proceedings of the IEEE/CVF International Conference on Computer Vision Workshops.
21. **Griffith, H**., & Biswas, S. (2019). Container type and fill level classification using a bottle-attachable IMU sensor. In *2019 IEEE 23rd International Symposium on Consumer Technologies (ISCT)* (pp. 147-152). IEEE.
22. **Griffith, H.,** & Biswas, S. (2019, June). Improving Water Consumption Estimates from a Bottle-Attachable Sensor Using Heuristic Fusion. In 2019 IEEE 20th International Symposium on" A World of Wireless, Mobile and Multimedia Networks"(WoWMoM) (pp. 1-3). IEEE.
23. **Griffith, H.,** & Biswas, S. (2019, March). Towards improved drink volume estimation using filter-based feature selection. In Future of Information and Communication Conference (pp. 280-290). Springer, Cham.
24. **Griffith, H.,** Shi, Y., & Biswas, S. (2019, January). Verification of IMU-based inclination estimates using video motion capture. In 2019 IEEE International Conference on Consumer Electronics (ICCE) (pp. 1-4). IEEE.
25. **Griffith, H.**, Biswas, S., & Komogortsev, O. (2018, November). Towards reduced latency in saccade landing position prediction using velocity profile methods. In *Proceedings of the Future Technologies Conference* (pp. 79-91). Springer, Cham.
26. **Griffith, H.**, Biswas, S., & Komogortsev, O. (2018, April). Towards improved saccade landing position estimation using velocity profile methods. In SoutheastCon 2018 (pp. 1-2). IEEE.
27. **Griffith, H.,** & Biswas, S. (2017, July). Home-based upper extremity rehabilitation support using a contactless ultrasonic sensor. In *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 853-856). IEEE.
28. **Griffith, H.**, Hajiaghajani, F., & Biswas, S. (2017, July). Office activity classification using first-reflection ultrasonic echolocation. In *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 4451-4454). IEEE.
29. **Griffith, H.**, & Griffith, A. (2017, March). Integration of an Intelligent Tutoring Software within an accelerated Engineering mathematics course. In *2017 IEEE Integrated STEM Education Conference (ISEC)* (pp. 131-134). IEEE.
30. **Griffith, H.**, Ranganathan, R., & Biswas, S. (2016, December). Towards a first-reflection ultrasonic sensor array for compensatory movement identification in stroke sufferers. In *2016 IEEE 35th International Performance Computing and Communications Conference (IPCCC)* (pp. 1-2). IEEE.
31. **Griffith, H.**, & Griffith, A. (2016, October). A dynamic learning model for accelerated pre-matriculation mathematics programs: A work-in-progress. In *2016 IEEE Frontiers in Education Conference (FIE)* (pp. 1-3). IEEE.
32. **Griffith, H.**, Hajiaghajani, F., & Griffith, A. (2016, October). Enhancing continuity between gender diversity interventions using hybrid social networks. In *2016 IEEE Frontiers in Education Conference (FIE)* (pp. 1-5). IEEE.
33. **Griffith, H.**, Shi, Y., & Biswas, S. (2016, August). A wearable system for asymmetric contactless human sensing. In *2016 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 4991-4994). IEEE.
34. **Griffith, H.**, Shi, Y., & Biswas, S. (2016, August). Contactless on-bed activity sensing using first-reflection echolocation. In *2016 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 4925-4928). IEEE.

35. **Griffith, H.**, & Griffith, A. (2016, March). Increasing gender diversity amongst intending engineering majors using social networks: A work in progress. In *2016 IEEE Integrated STEM Education Conference (ISEC)* (pp. 203-206). IEEE.
36. **Griffith, H.,** Griffith, A., & Ajami, R. (2014, June). Designing Customizable Content Delivery Systems Using Lean-Agile Principles for Improved International Student Success. In *2014 ASEE International Forum* (pp. 20-11).
37. McCann, J., Janning, D., Kuhl, D., Zeller, K., Radcliffe, J., Schneider, S., ... & **Griffith, H.** (2008, July). Analysis of arrays of microstrip half-width leaky wave antennas. In *2008 IEEE Antennas and Propagation Society International Symposium* (pp. 1-4). IEEE.
38. Hoover, L., **Griffith, H.**, & DeVries, K. (2008, May). Low noise X-band exciter using a sapphire loaded cavity oscillator. In *2008 IEEE International Frequency Control Symposium* (pp. 309-311). IEEE.
39. Vikram, M., **Griffith, H.**, Huang, H., & Shanker, B. (2007, June). Accelerated cartesian harmonics for fast computation of time and frequency domain low-frequency kernels. In *2007 IEEE Antennas and Propagation Society International Symposium* (pp. 5607-5610). IEEE.
40. Stevens, D., Subramanyam, G., Koss, K., Casto, M., Neidhard, R., Pasala, K., ... & **Griffith, H.** (2007, June). A periodically perturbed coplanar wave guide transmission line leaky wave antenna. In *2007 IEEE Antennas and Propagation Society International Symposium* (pp. 465-468). IEEE.
41. Radcliffe, J., **Griffith, H.**, McCann, J., Zeller, K., Pasala, K., Schneider, S., & Kempel, L. (2007, June). Empirical analysis of the effects of parasitic elements on the half-width leaky wave antenna. In *2007 IEEE Antennas and Propagation Society International Symposium* (pp. 3624-3627). IEEE.
42. Corwin, M., Kempel, L., **Griffith, H.**, & Schneider, S. (2006, July). Driving Point Impedance for a Linear Array of Half-width Leaky-wave Antennas. In *2006 IEEE Antennas and Propagation Society International Symposium* (pp. 4251-4254). IEEE.

Recent Academic Service (>2019)

- Faculty advisor to various student clubs (SAC - Society of Women Engineers, Google Developer Student Club; UTSA – IEEE Robotics and Automation Society, Advanced Robotics) – AY 2022
- Volunteer summer science and engineering instructor for SAC TRIO Upward Bound Programming (3 weeks, ~ 70 hours)
- Treasurer and Secretary, IEEE Lone Star Section AESS Chapter, October 2021 – October 2023
- Faculty advisor for two students in UTSA CEID Undergraduate Research Fellows Program – AY 2022
- Advisor to two UTSA Engineering Senior Design Teams – AY 21
- Faculty advisor for two students in UTSA CEID Undergraduate Research Fellows Program – AY 21
- ECE Department Volunteer for UTSA Day, October 2021
- Reviewer for various IEEE and MDPI journals (recent activity summarized on Publons)
- Reviewer for various IEEE conferences (2021 IEEE EMBC, 2021 IEEE ISEC, etc.)
- Technical Program Committee Member, IEEE ICCE Berlin, 2021 and 2022
- Guest Editor – “Intelligent Control of Actuator Systems," *Actuators* (MDPI Journal), 2021
- Advisor to UTSA IEEE RAS Club submission to Navy AI Tracks at Sea Student Challenge – AY 2021
- Volunteer Tutor, ECE Department, UTSA – Fall 2020
- Session Chair - Consumer Healthcare 1, IEEE 23rd International Symposium on Consumer Electronics (ISCT), Ancona, Italy, 2019

Recent Awards (>2019)

- IEEE ISEC Best Paper Award – Work-In-Progress Track, Princeton, NJ (held online), 2022
- Inaugural stEm Peer Fellow – Engineering PLUS Alliance, Northeastern University, 2022
- UTSA Honors Faculty Fellow - 2021
- Elevated to IEEE Senior Member based upon professional achievements (~10% of total IEEE members), December 2021
- IEEE CCWC Best Paper Presentation Award, Las Vegas, NV, December, 2020