Jeong Yang, Ph.D. Curriculum Vitae

Director, Center for Information Technology and Cybersecurity
Associate Professor & Program Coordinator
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EMPLOYMENT & POSITION

2024-current **Director, Center for Information Technology and Cybersecurity**

*Significant Outcomes & Impacts***:** *1) An active role on building a Joint Activity Cyber Center led by Port San Antonio in collaboration with TAMU Cybersecurity Center with the connection of Air Force. 2) Initiation of DOD VICEROY and CSA programs at A&M-SA with DOD grants-22 CS/Cyber students with stipends of $2,500–$7,500, 2 students at DOD Maven 2025 summer internship, 3 student interns for leading Security+ Certification and CTF competition, 6 students attending 2025 BlackHat conference (the largest hacking conference). 3) Co-organized hosting the White House Office of the National Cyber Director (ONCD) for a special event about cybersecurity and workforce. 4) Annual Status Reports for the NSA CAE Designation and NSA/DHS Certificates issued to graduates who completed required courses***.***

2023-current **Program Coordinator & Associate Professor**
ABET Coordinator, Dept. of Computational, Engineering, & Mathematical Sciences
College of Arts and Sciences, Texas A&M University-San Antonio

2021-2023 **Associate Chair & Associate Professor**
ABET Coordinator, Department of Computing and Cyber Security
College of Business, Texas A&M University-San Antonio

*Significant Outcomes & Impact***:** *1) Development of rubrics for assessing Student Outcomes and data collection with a collaborative faculty effort and establishment of Program Educational Objectives for Computer Science program aligned with the university mission. 2) Guided the faculty to prepare assessment reports, for required courses and conducted data analysis. 3) Prepared & submitted ABET Readiness Review Report and Self-Study Report. 4) Led hosting ABET Program Evaluator's Site Visit-no deficiencies, concerns, or weaknesses found for all eight categories. This is university's first ABET accreditation and only Computer Science program in San Antonio that is ABET accredited. 5) Competent coordination of multiple programs for Computer Science, Cybersecurity, Cyber Engineering Technology and Information Technology-Information Assurance & Security. 6) Provided the guidance on applying & used CS ABET assessment approach for IEPs and IERs across other computing programs.*

2016-2021 Assistant Professor
ABET Coordinator (2018-2021), Department of Computing and Cyber Security
College of Business, Texas A&M University-San Antonio

2008-2016 Lecturer, Department of Electrical Engineering and Computer Science
Frank H. Dotterweich College of Engineering, Texas A&M University–Kingsville

1999-2002	Research & Teaching Assistant Department of Computer Science & Software Engineering Samul Ginn College of Engineering, Auburn University
1999-1999	Web Developer, Department of Agricultural Economics & Rural Sociology, Auburn University
1997-1998	Computer Instructor, JungWon School, South Korea
1991-1993	System Programmer, Technical Research Center, Kia Motors, South Korea

LEADERSHIP TRAINING AND EDUCATION

2022-2023 Texas Academic Leadership Academy (TALA) Cohort 5 Academy Fellow

Enhancing leadership skills and capacity in leaders in academic affairs, professional development webinars, leadership plan development, EQi 360 assessment of Emotional Intelligence – nominated by the college, supported by the provost office.

Received the Certificate of Recognition and Medal for Dedication and Excellence

Ph.D., 2016 Computer Science and Software Engineering, Auburn University

M.S., 2001 Computer Science and Software Engineering, Auburn University

B.S., 1991 Computer Science, Hallym University, South Korea

FUNDED EXTERNAL GRANTS

1/24-12/26 **Principal Investigator, National Science Foundation (NSF) Award #2334243**
Title: CAP: AI-Ready Institution Transforming Tomorrow's Research and Education with AI Focused on Health and Security (Jag-AI)
Amount: $385,475 + $14,516 Google Cloud credits
Co-PIs: Z. Cao, G. Liang, & Y. Lee

*Significant Outcomes & Impact***:** *1) Establishment of an AI infrastructure at A&M-SA (Jag-AI) with two initiatives-'Foundational and Use-Inspired AI Research Initiative' on research aimed at improving healthcare quality of life (medical imaging), transforming national defense-security (software malware detection), and effective utilization of cloud computing resources (performance analysis on model deployment) and 'AI for All Education and Training Initiative' to generate interest, increase awareness and advance careers in AI by developing curricula and providing training to faculty & researchers. 2) Creation of AI Certificates with related courses at both undergraduate and graduate levels. 3) AI Training Workshops provided for Machine Learning and AI Fundamentals for Researchers – 33 faculty and master students received the certificate of completion for attending all sessions in each of SP25, SU24, and SP23 semesters, 4) 7 undergraduate and graduate research assistants hired to engage in the research-student co-authored publications and conference presentations with enhanced capability of utilizing ML-AI model deployment-analysis-evaluation on Google Cloud Platform(GCP).*

5/23-5/26 **Co- Principal Investigator: PI at A&M-SA, Department of Defense (DoD) Air Force Research Lab & Griffiss Institute**, Amount: $1,750,000
Title: VICEROY for NCAE-C South Central Region Consortium-VICEORY Southwest
Collaborators: TAMU Lead PI: D. Hamilton, PVAMU PI: L. Ngamassi

Significant Outcomes & Impact: 1) A&M-SA as a key participant in VICEROY Southwest Region collaborating with TAMU Cybersecurity Center and PVAMU. 2) The goal is to create a pipeline, increasing the quantity and quality of job-ready graduates in cybersecurity who would potentially consider a career at DOD. 3) Students are trained and receive support for their growth through the completion of DOD approved 8570 certifications and courses focused on the mathematical foundations of cryptography and data science-22 CS/Cyber students with stipends of $2,500–$7,500, 2 students at DOD Maven 2025 summer internship, 3 student interns for preparing & leading Security+ Certification and CTF competition, 6 students attending 2025 BlackHat conference (the largest hacking conference).

10/21-9/24 **Principal Investigator, National Science Foundation (NSF) Award #2131193**
Title: CISE-MSI: RCBP-RF: S&CC: Building a Smart Mobility Network for the San Antonio Transit to Improve Transit Service and Social Impact (SmartSAT)
Amount: $299,897 + $14,640 Google Cloud credits
Co-PIs: Y. Lee, I. Alsmadi, M. Abdul-Rahman, D. Delgado, Senior Personnel: Z. Cao.

*Significant Outcomes & Impact***:** *1) Development of a customizable secure app (SmartSAT) that networks users with enhanced accurate information about public transit service. 2) Research on arrival time accuracy & user privacy, enabling data collection to evaluate the impact of poverty, race, and ethnicity on the experience of transit users. 3) Field studies and predictive modeling identified punctuality issues and optimization opportunities for SA bus routes. 4) The social impact on the role of technologies such as SmartST for Latinx communities in SA. 4) Privacy-preserving framework for efficient spatial nearest-neighbor search for rider privacy. 5) 9 undergraduate & graduate research assistants hired to engage in the research-student co-authored publications and conference presentations with enhanced capability of deploying applications & evaluating their performance on GCP.*

10/18-7/23 **Principal Investigator, National Science Foundation (NSF) Award #1832433**
Title: Recruiting and Retaining Students into Computing
Amount: $ 290,235, Co-PIs: A. Lodgher, Y. R. Kim, Evaluator: M. Janysek

Significant Outcomes & Impact: 1) Broadened and strengthened pipeline of A&M-SA students, entering the field of computer science and cyber security. 2) The integration of security modules with the developed MEA ((Model-Eliciting Activities) projects into Computer Science courses at three institutions (A&M-SA, San Antonio College, Laredo College), impacting approximately 570 students across multiple sections of the courses. 3) 12 instructors trained on the utilization of security modules with MEA projects. 4) 20 female students attended the Women in Cyber Security national conference in 2019, 2021, and 2022 for valuable networking opportunities engaging in workshops and presentations from tech industries and government agencies. 5) Creative student group solutions and their implementation results for cipher algorithms from MEA projects and analysis results of research questions - creative cipher algorithms, student's great understanding of cyber security concepts. 6) Several undergraduate research assistants hired to engage in the research-student co-authored publications and conference presentations.

10/17-9/18 Co- Principal Investigator, National Security Agency Grant # H98230-17-1-0395
Title: Cyber Security Modules for Core, Major, and Elective Courses in the Bachelor of Science (BS) Computer Science Curriculum
Amount: $130,371, With A. Lodgher (PI) & U. Bulut (SP)

10/14-9/20 Senior Personnel, National Science Foundation (NSF), Award # **1439861**
Title: Robert Noyce Teacher Scholarship: Future STEM Teachers in South Texas ($F(ST)^2$), Amount: $1,199,731
With Y. Lee (PI), Co-PIs: S. Park, M. Wong-Ratcliff, R. Ahangar, M. Castro

10/12-9/15 Senior Personnel, National Science Foundation (NSF), Award # **1239993**
Title: Robert Noyce Teacher Scholarship Program Capacity Building: Future STEM Teachers in South Texas ($F(ST)^2$), Amount: $291,352.
With Young Lee (PI), Co-PIs: S. Park M. M. Wong-Ratcliff, M. Nijim, R. Ahangar

1/14-8/15 Co- PI, Coastal Bend Diabetes Community Coalition (CBDCC)
Project: Diabetes Database Management System for CBDCC
Amount: $8,000, With Young Lee (PI)

11/11-10/13 Co- PI, Kiewit Offshore Services, Ltd.
Construction Scheduling with Primavera P6 for Kiewit Olympus TLP project
Amount: $7,484, With Young Lee (PI),

3/12-8/13 Co- PI, Texas Animal Control Association (TACA)
Design and Development of TACA Membership Management System
Amount: $7,522, With Young Lee (PI)

PROPOSAL SUBMITTED, CURRENTLY UNDER REVIEW

8/25-10/26 Principal Investigator, DOD (Department of Defense)-NSA (National Security Agency)
Title: DOD CSA (Cyber Service Academy) at Texas A&M University-San Antonio
Amount: $430,317, Co-PIs: R. Jones, Y. Lee, Z. Cao

8/25-10/26 Principal Investigator at A&M-SA, DOD (Department of Defense)-NSA
Title: 2025 Texas A&M DOD Cyber Service Academy & Capacity Building
Amount: $50,000, TAMU Lead-PI: D. Hamilton, Subaward from TEES

9/25-8/26 Co- Principal Investigator, AWS (Amazon Web Services)
Title: AI-Driven Selective Recovery of Critical Minerals from Mine Tailings via Alternating Current and Ligand-Enhanced Separation
Amount: $100,000 + $70,000 AWS Credits, PI: M. H. Hassan

FUNDED INTERNAL GRANTS

10/18-9/23 Co-PI, Texas A&M University-San Antonio, Strategic Planning Seed Fund, "JAGCoders: Build a Campus-Wide Code Development Community," Izzat Alsmadi and Jeong Yang, $49,628.

1/20-5/20 PI, PCOE (President's Commission on Equity) Grant, A&M-SA, "San Antonio Area Aspirations Recognitions Award Ceremony," Jeong Yang, $1,975.50.

2/18-12/19 PI, Texas A&M University-San Antonio, Strategic Planning Initiative Seed Fund, "Building a Secure Code Analyzer in a Cloud-Based Object-Oriented Programming Environment, JaguarCode," Jeong Yang and Young Rae Kim (Evaluator), $18,000.

2/18-1/19 Co-PI, Texas A&M University-San Antonio, Strategic Planning Initiative Seed Fund, "Hola STEM: Culturally Relevant STEM Curricula for Hispanic American Youth," Young Rae Kim, James Jurica, Marianne Phillips, Jeong Yang, John Romo, Hoan Duong, $18,000.

2/18-1/19 Co-PI, Texas A&M University-San Antonio, Strategic Planning Initiative Seed Fund, "Encouraging Female Students to Pursue STEM Fields," Ummugul Bulut, Jeong Yang, Memet Bulut, $4,160.

1/17-12/17 PI, Texas A&M University-San Antonio, Academic Programs – Faculty Research Equipment Fund, Two Dell PowerEdge R730 Servers with Intel Xeon Phi Processor 7290F as equivalent to the amount of $38,676, Jeong Yang.

1/17-8/17 PI, College of Business, A&M-SA, "Migration, Expansion, and Evaluation of JaguarCode - A Platform Independent Cloud-Based Object-Oriented Programming Environment," Jeong Yang and Jingquan Li, one course release and $5,740.

2016 Co-PI, TAMUK Support of Service-Learning Courses or Programs, "UIL (University Interscholastic League) Computer Science," David Hicks and Jeong Yang, $7,000.

2016 PI, TAMUK (Texas A&M University-Kingsville) Support of Service-Learning Courses or Programs, "UIL (University Interscholastic League) Computer Science," Jeong Yang and David Hicks, $6,000.

2015 PI, TAMUK Support of Service-Learning Courses or Programs, "UIL (University Interscholastic League) Computer Science," Jeong Yang, $5,850.

2015 PI, The TAMUK Council for Undergraduate Research (TCUR), "One-to-One Virtual Mentoring System (VMS) for Enhancing Student Programmer's Programming Skill and Logical Thinking," Jeong Yang and Young Lee, $4,500.

10/08-12/09 PI, Frank H. Dotterweich College of Engineering, Texas A&M University-Kingsville, "Development of Websites for the Frank H. Dotterweich College of Engineering and Six Departments," Jeong Yang, $16,000.

REFERRED JOURNAL ARTICLES AND BOOK CHAPTERS (* indicates student.)

Significant Outcomes and Impacts: All the identified student co-authors (undergraduate and graduate in Computer Science) in blue worked as research assistant supported by the Grants engaged in the research focuses related to the grant projects described above.

- Y. Lee, E. Diaz*, **J. Yang**, & B. Liu, "Enhancing Concurrency Bug Detection in Rust Programs Through LLVM IR Based Graph Visualization," *High-Confidence Computing (IF:3.2, Q1),* submitted, under review.
- Z. Cao, B. Kishiyama*, & **J. Yang**, "Security and Regulation: Cybersecurity, Privacy, and Trust – Protecting Information and Ensuring Responsible Technology Use," *Computers and Security (IF:4.8, Q1)*, submitted, under review.
- Y. Lee, S. J. Boshra*, **J. Yang**, G. Liang, & Z. Cao, "Machine Learning-Based Vulnerability Detection in Rust Code Using LLVM IR and Transformer Model." *Machine Learning and Knowledge Extraction (IF:4.0, CiteScore - Q1 (Engineering (miscellaneous))*, submitted, under review.

- R. Jonnala*, **J. Yang**, Y. Lee, G. Liang, & Z. Cao, "Measuring and Improving the Efficiency of Python Code Generated by LLMs using CoT and Fine Tuning," *IEEE Access (IF:3.4, Q1)*, 2025, accepted, in press.
- D. Delgado, **J. Yang**, M. Abdel-Rahman, & Y. Lee, "Infrastructures of Inequality and Enclaves of Inaccessibility: Understanding Public Transit's Role in the Maintenance of Race and Class Segregation in San Antonio, Texas," *Critical Sociology (IF:1.9, Q1), 2025, DOI: 10.1177/08969205251355278/ ID: CRS-24-0191.R4.*
- **Yang, J.;** Abraham, A*. "Analyzing the Features, Usability, and Performance of Deploying a Containerized Mobile Web Application on Serverless Cloud Platforms." *Future Internet (IF:2.8, CiteScore - Q1 (Computer Networks and Communications)) 2024, 16, 475*. https://doi.org/10.3390/fi16120475.
- Y. Lee, **J. Yang**, M. Abdel-Rahman, & D. Delgado, "SmartSAT*:* A Customizable Mobile-Web App toward Improving the Efficiency and Equitable Access of San Antonio Public Services," 2024*, Software Impacts (IF:1.3)*, https://doi.org/10.1016/j.simpa.2024.100714.
- B. Kishiyama*, Lee, Y.; **Yang, J**. "VulRepair's Perfect Prediction by Leveraging the LION Optimizer." *Applied Sciences (IF:2.5, JCR:Q1) - Computing and Artificial Intelligence, Special Issue-Cyber Security and Software Engineering*. 2024. *Appl. Sci.* 2024, *14*(13), 5750; https://doi.org/10.3390/app14135750**.**
- Wang*, B. Kishiyama*, D. Lopez*, & **J. Yang**, "An Overview of Infrastructure as Code (IaC) with Performance and Availability Assessment on Google Cloud Platform," 2024 Springer Book Series: Lecture Notes in Networks and Systems, https://link.springer.com/chapter/10.1007/978-3-031-56950-0_41.
- R. Kim, **J. Yang**, Y. Lee, & B. Earwood, "Assessing Cyber Security Problem-Solving Skills of Engineering Students Through Model-Eliciting Activities Using an Analytic Rubric," 2023, *IEEE Access (IF:3.4, Q1),* DOI:10.1109/ACCESS.2023.3348554.
- A. Abraham* & **J. Yang**, "A Comparative Analysis of Performance and Usability on Serverless and Server-Based Google Cloud Services," 2023 Springer Book Series: Lecture Notes in Networks and Systems**,** https://doi.org/10.1007/978-3-031-33743-7_33**.**
- **Yang J**., Lee Y., McDonald A.P*. (2021) SolarWinds Software Supply Chain Security: Better Protection with Enforced Policies and Technologies. In: Lee R. (eds) Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing. SNPD 2021. Studies in Computational Intelligence, vol 1012. Springer, Cham. https://doi.org/10.1007/978-3-030-92317-4_4.
- Shan, M*. and **Yang, J.** (2021), "Investigating the accessibility and impacts of cybersecurity programs on high-school girls' long-term industry engagement", *Information and Computer Security (IF:1.6, Q2),* Vol. 30 No. 3, pp. 309-323. https://doi.org/10.1108/ICS-05-2021-0067.
- **J. Yang**, D. Velez, H*. A. Staley*, & N. Mathew*, "A Practice of Detecting Insider Threats within a Network," 2020 Springer Nature Book: Transactions on Computational Science & Computational Intelligence-Advances in Security, Networks, and Internet of Things, https://doi.org/10.1007/978-3-030-71017-0_13.
- **J. Yang**, Y. Lee, A. Hernandez, & J. Sanchez*, "Evaluating and Securing Text-Based Java Code through Static Code Analysis," *Journal of Cybersecurity Education, Research and Practice*, Vol. 2020: No. 1, Article 3. https://digitalcommons.kennesaw.edu/jcerp/vol2020/iss1/3/

- Y. Lee & **J. Yang**, "Analysis of Bug Types of Textbook Code with Open Source Projects," 2020 Springer Nature Book: Transactions on Computational Science & Computational Intelligence-Advances in Software Engineering, Education, and e-Learning, https://doi.org/10.1007/978-3-030-70873-3_44.
- E. Fountain, L*. Tawalbeh and **J. Yang**, "Predicting Volume of Vehicular Traffic Using Machine Learning," *Issues in Information Systems*, 2020, Vol 21, Issue 3. https://iacis.org/iis/2020/3_iis_2020_53-58.pdf.
- **J. Yang**, Y. Lee, and Kai H. Chang, "Evaluations of JaguarCode: A Web-Based Object-Oriented Programming Environment with Static and Dynamic Visualization," *The Journal of Systems and Software (2018*), DOI: 10.1016/j.jss.2018.07.037.
- Y. Lee, D. B. Marepalli*, and **J. Yang**, "Teaching Test-Driven Development using DOJO," Journal of Computing Sciences in Colleges, Volume 34, Issue 4, 2017. https://dl.acm.org/doi/abs/10.5555/3055338.3079049
- K. B. Shah*, **J. Yang**, and Y. Lee, "Enhancing Engineering Education Using Virtual Lab Technology," *Transactions on Techniques for STEM Education*, Volume 1, Issue 4, 2016.
- **J. Yang**, Y. Lee, S. Park, M. Wong-Ratcliff, R. Ahanger, and M. Mundy, "Discovering the Needs Assessment of Certified STEM Teachers for High-Need Schools in South Texas," *Journal of STEM Education: Innovations and Research*, Volume 16, Issue 4, 2015.
- P. Koyya*, Y. Lee, and **J. Yang**, "Feedback for Programming Assignments Using Software-Metrics and Reference Code," *International Scholarly Research Notices (ISRN) Software Engineering,* Vol. 2013, Article ID 805963, 2013. doi:10.1155/2013/805963
- P. K. Sevella*, Y. Lee, and **J. Yang**, "Determining the Barriers Faced by Novice Programmers", *International Journal of Software Engineering*, Vol 4. No. 1, pp.10-22, 2013.
- Y. Lee and **J. Yang**, "Locating Reusable Classes Using Dependency in Object-Oriented Software", *International Journal on Computing*, Vol.2 No.1. 2012.
- Lee, Y., **Yang, J**., Chang, K.H. (2010). Identifying Connected Classes for Software Reuse and Maintenance. In: Sobh, T. (eds) Innovations and Advances in Computer Sciences and Engineering. Springer, Dordrecht. https://doi.org/10.1007/978-90-481-3658-2_68.

PEER-REVIEWED CONFERENCE PAPERS AND PRESENTATIONS (* indicates student.)

Significant Outcomes and Impacts: All the identified student co-authors (undergraduate and graduate in Computer Science) in blue worked as research assistant supported by the Grants engaged in the research focuses related to the grant projects described above.

- H. Wang*, **J. Yang**, & Y. Lee, "Evaluating the Usability, Performance, and Cost-Efficiency of Deploying ML Models on Cloud Platforms," *2025 International Conference on Cloud and Big Data Computing, IEEE publishing*.
  - Paper presentation will be at the conference in Manchester, UK, August 19, 2026.
- R. Jonnala*, G. Liang, **J. Yang**, & I. Alsmadi, "Exploring the Potential of Large Language Models in Public Transportation: San Antonio Case Study." *AAAI (Association for the Advancement of Artificial Intelligence) Workshop* .
  - Paper presentation at the conference in Philadelphia, PA, March 3, 2026.

- D. Deanda*, Y. Masupalli***, J. Yang,** Y. Lee, Z. Cao & G. Liang, "Benchmarking the Robustness of Contrastive Learning Models for Medical Image-Report Retrieval under Occlusion Attacks" *AAAI (Association for the Advancement of Artificial Intelligence) Workshop* .
  - Paper presentation at the conference in Philadelphia, PA, March 3, 2026.
- H. Wang*, **J. Yang**, G. Liang, Y. Lee, & Z. Cao, "Analyzing the Performance, Usability, and Cost-Efficiency of Deploying ML Models on BigQuery ML and Vertex AI in Google Cloud," *2024 Internation Conference on Cloud and Big Data Computing, ACM publishing,* https://dl.acm.org/doi/10.1145/3694860.3694863.
  - Paper presentation at the conference in Oxford, UK, August 12, 2025.
- **Yang, J**., Lee, Y., Abdel-Rahman, M., & Cao, Z. (2024, June). "Enhancing Urban Mobility: SmartSAT's Impact on Public Transportation Services and Commuting Experience." In *2024 ASEE Annual Conference & Exposition*. https://peer.asee.org/46840.
  - Paper presentation at the conference in Portland, OR, June 12, 2025.
- B. Han*, C. Moran*, **J. Yang**, Y. Lee, Z. Cao and G. Liang, "Multi-Scale Self-Supervised Consistency Training for Trustworthy Medical Imaging Classification," *2024 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, Orlando, FL, USA, 2024, pp. 1-6, doi: 10.1109/EMBC53108.2024.10782322.
  - Paper presentation at the conference in Orlando, FL, July 15, 2024.
- Y. Lee, **J. Yang** and Y. R. Kim, "Adopting Model-Eliciting Activities in an Undergraduate Software Engineering Course Through Real-World Projects," *2023 IEEE Frontiers in Education Conference (FIE)*, 2023, pp. 1-5, doi: 10.1109/FIE58773.2023.10343438.
  - Paper presentation at the conference in College Station, TX, October 19, 2023.
- Y. Lee, A. McDonald* and **J. Yang**, "Identifying Code Tampering Using A Bytecode Comparison Analysis Tool," *2023 IEEE/ACIS 21st International Conference on Software Engineering Research, Management and Applications,* 2023, pp. 69-76, doi: 10.1109/SERA57763.2023.10197775.
  - Virtual paper presentation at the conference, May 24, 2023.
- **J. Yang**, Y. Lee, W. Noonan*, and A. Abraham*. 2022. Demo Abstract: SmartSAT - A Customizable Secure App for San Antonio Transit Pilot Project. In Proceedings of the 20th *ACM International Symposium on Mobility Management and Wireless Access (MobiWac '22).* ACM, New York, NY, USA, https://doi.org/10.1145/3551660.3560910.

  Selected ACM Research Showcase on Kudos: https://www.growkudos.com/publications/10.1145%25252F3551660.3560910/reader.
  - Virtual paper presentation at the conference, October 25, 2022.
- **J. Yang**, Y. Rae Kim and B. Earwood, "A Study of Effectiveness and Problem Solving on Security Concepts with Model-Eliciting Activities," *2022 IEEE Frontiers in Education Conference (FIE)*, Uppsala, Sweden, 2022, doi: 10.1109/FIE56618.2022.9962412.
  - Virtual paper presentation at the conference, October 10, 2022.
- A. Abraham*, D. Livingston*, I. Guerra*, and **J. Yang**, "Exploring the Application of Machine Learning Algorithms to Water Quality Analysis," *2022 IEEE/ACIS 7th International Conference on Big Data, Cloud Computing, and Data Science (BCD)*, 2022, doi: 10.1109/BCD54882.2022.9900636.

- Virtual paper presentation at the conference, August 5, 2022.

- B. Earwood, **J. Yang** and Y. R. Kim, "Effective Learning of Cybersecurity Concepts with Model-Eliciting Activities," *2021 IEEE International Conference on Engineering, Technology & Education (TALE),* 2021, doi: 10.1109/TALE52509.2021.9678713.
  - Virtual paper presentation at the conference, December 6, 2021.
- M. Alicea*, A. P. McDonald*, C. Tang* and **J. Yang**, "Exploring the Application of Machine Learning Algorithms to the City Public Bus Transport," 2020 IEEE International Conference on Big Data Science and Engineering, doi: 10.1109/BigDataSE50710.2020.00011.
- **J. Yang**, B. Earwood, Y. Kim, and A. Lodgher, "Implementation of Security Modules with Model-Eliciting Activities in Computer Science Courses," 2020 ASEE (American Society for Engineering Education) Annual Conference Proceeding, DOI: 10.18260/1-2—34776.
- **J. Yang** and A. Lodgher, "Fundamental Defensive Programming Practices with Secure Coding Modules," 2019 International Conference on Security and Management, ISBN: 1-60132-509-6.
- Y. Lee and **J. Yang**, "Visualization of Context Sensitive Data Flow for Secure Object-Oriented Programming," 2019 International Conference on Software Engineering Research and Practice, ISBN: 1-60132-510-X.
- **J. Yang**, C. Barrientes*, J. Sanchez*, and Y. Kim, "Source Code Analysis for Secure Programming Practices," 2018 IEEE International Conference on Computational Science and Computational Intelligence, DOI: 10.1109/CSCI46756.2018.00164.
- **J. Yang**, A. Lodgher and Y. Lee, "Secure Modules for Undergraduate Software Engineering Courses," 2018 IEEE Frontiers in Education Conference (FIE), doi: 10.1109/FIE.2018.8658433.
- A. Lodgher, **J. Yang** and U. Bulut, "An Innovative Modular Approach of Teaching Cyber Security across Computing Curricula," 2018 IEEE Frontiers in Education Conference (FIE), doi: 10.1109/FIE.2018.8659040.
- Y. Lee and **J. Yang**, "Reverse Engineering Environment for Secure Coding in Java," ASEE Gulf-Southwest Section Annual Conference (ASEE GSW), 2018.
- S. S. Kumbhar*, Y. Lee and J. Yang, "Hybrid Encryption for Securing Shared Preferences of Android Applications," 2018 IEEE International Conference on Data Intelligence and Security (ICDIS), doi: 10.1109/ICDIS.2018.00047.
- **J. Yang**, Y. Lee, and K. H. Chang, "Initial Evaluation of JaguarCode: A Web-Based Object-Oriented Programming Environment with Static and Dynamic Visualization," 2017 30th IEEE International Conference on Software Engineering Education and Training (CSEE&T), pp. 152-161, DOI 10.1109/CSEET.2017.32.
- **J. Yang**, Y. Lee, D. Gandhi*, and S. G. Valli*, "Synchronized UML Diagrams for Object-Oriented Program Comprehension," 2017 12th IEEE International Conference on Computer Science Education (ICCSE), DOI 10.1109/ICCSE.2017.8085455.
- D. Hicks and **J. Yang**, "Increasing Awareness and Participation in Computer Science Education," The 13th International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'17), 2017.

- B. Earwood*, **J. Yan**g, and Y. Lee, "Impact of Static and Dynamic Visualization in Improving Object-Oriented Programming Concepts," 2016 IEEE Frontiers in Education (FIE): The Crossroads of Engineering and Business, DOI: 10.1109/FIE.2016.7757639.
- D. Hicks and **J. Yang**, "Leveraging Interscholastic Competition in Computer Science Education," The 12th International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'16), 2016.
- **J. Yang**, Y. Lee, and D. Hicks, "Synchronized Static and Dynamic Visualization in a Web-Based Programming Environment," 2016 IEEE 24th International Conference on Program Comprehension (ICPC), DOI: 10.1109/ICPC.2016.7503733.
- M. Srinivasan*, **J. Yang**, and Y. Lee, "Case Studies of Optimized Sequence Diagram for Program Comprehension," 2016 IEEE 24th International Conference on Program Comprehension (ICPC), DOI: 10.1109/ICPC.2016.7503734.
- M. Srinivasan*, Y. Lee, and **J. Yang**, "Enhancing Object-Oriented Programming Comprehension using Optimized Sequence Diagram," 2016 IEEE 29th International Conference on Software Engineering Education and Training (CSEE&T), DOI: 10.1109/CSEET.2016.37.
- **J. Yang**, Y. Lee, D. Hicks, and Kai H. Chang, "Enhancing Object-Oriented Programming Education using Static and Dynamic Visualization," 2015 IEEE Frontiers in Education (FIE): Launching a New Vision in Education Engineering, DOI: 10.1109/FIE.2015.7344152.
- **J. Yang**, Y. Lee, D. Hicks, and B. Earwood*, "Virtual Mentoring System for Enhancing Student Programmer's Coding and Reasoning Skills," 8th Annual Mentoring Conference Proceedings: New Perspectives in Mentoring: A Quest for Leadership Excellence & Innovation, Albuquerque, NM: University of New Mexico, 2015.
- Y. Lee and **J. Yang**, "Identifying Architectural Changes Using Software Metrics", International Conference on Software Engineering Research and Practice, 2010.
- Y. Lee and **J. Yang**, "Visualization of Software Evolution," International Conference on Software Engineering Research and Practice, 2008.
- Y. Lee, **J. Yang**, and Kai H. Chang, "Quality Measurement in Open-Source Software Evolution," IEEE 7th International Conference on Quality Software (QSIC), 2007.
- **J. Yang**, D. Hendrix, Kai H. Chang, and D. Umphress, "An Empirical Validation of Complexity Profile Graph," ACM Southeast Conference, 2005.

MS THESIS ADVISED

- Advisor: Ramya Jonnala, MS-Computer Science, "Measuring and Improving the Efficiency of Python Code Generated by LLMs (Large Language Models) using CoT Prompting and Fine Tuning," graduated in May 2025.
- Committee member: Md. Imran Hasan – MS-Biology Student, "A Computational System Biology Approach for Unveiling Novel Drug Targets in Staphylococcus Aureus", graduated in May 2025.
- Advisor: Hongyu Wang, MS-Computer Science, "Analyzing the Usability, Performance, and Cost-Efficiency of Deploying ML Models on Cloud Computing Platforms," graduated in August 2024.

- Advisor: Anoop Abraham, MS-Computer Science, "Analyzing the System Features, Usability, and Performance of a Containerized Application on Cloud Computing Systems," graduated in August 2023.
- Committee member: Andrew Trombley, MS-Computer Science, "How Cloud, Edge, and Mist computing affect resource allocation in VANETs," graduated in Fall 2023.
- Advisor: Arlen P. MacDonald, MS-Computer Science, "Investigating Security Standards and Technologies Related to SolarWinds Breach," graduated in December 2021.

STUDENT PROJECT: ADVISING, MENTORING, AND POSTER/ORAL PRESENTATION

- Ramya Jonnala, J. Yang (Faculty Advisor), "Measuring and Improving the Efficiency of Python Code Generated by LLMs (Large Language Models) using CoT Prompting and Fine Tuning," Master Student Oral Presentation, Student Research Symposium, 2025, A&M-SA.
- Hongyu Wang, J. Yang (Faculty Advisor), "Analyzing the Usability, Performance, and Cost-Efficiency of Deploying ML Models on Cloud Computing Platforms," Master Student Oral Presentation, Student Research Symposium, 2024, A&M-SA.
- Anoop Abraham, J. Yang (Faculty Advisor), "Analyzing the System Features, Usability, and Performance of a Containerized Application on Cloud Computing Systems," Master Student Oral Presentation, Student Research Symposium, 2023, A&M-SA.
- William Noonan* and Anoop Abraham*, "Development of SmartSAT Mobile web App - A Customizable Secure App for San Antonio Transit Pilot Project," 2022- 2023.
- J. Yang, A. Lodgher, "Recruiting and Retaining Students into Computing," NSF HSI Program PI Meeting, November 6-8, 2019, Washington, DC.
- D. Velez*, H. A. Staley*, D. DeLeon*, N. Mathew*, J. Yang (Faculty Advisor), "Detecting Insider Threats from within Your Network" 16th Annual Texas A&M University System Pathways Student Research Symposium, November 7-8, 2019, Texas A&M International University, Laredo, TX.
- J. Yang and A. Lodgher, "Recruiting and Retaining Students into Computing," Annual Texas HSI Consortium, San Antonio, TX, May 23- 24, 2019.
- C. Barrientes*, J. Sanchez*, and J. Yang (Faculty Advisor), "Source Code Analysis for Secure Programming Practices," 15th Annual Pathways Student Research Symposium, West Texas A&M University, Nov 1-2, 2018.
- C. Barrientes*, A. Skitenko*, and J. Yang (Faculty Mentor), "A Side-by-Side Comparison of Sorting Algorithm Efficiency on a Cloud Platform and Local Machine," 4th Annual Student Research Symposium, TAMUSA, May 4-5, 2018.
- A. Lodgher and J. Yang, "Cyber Security Modules for Core, Major, and Elective Courses in the BS in Computer Science," Cybersecurity Education Workshop, April 24, 2018.
- D. Hicks and J. Yang, "Service Learning in Support of Computer Science Education - students teaching students to code," High-Impact Practices in Higher Education Conference, Texas A&M University-Kingsville, March 31, 2017.

- M. Srinivasan*, (Faculty Mentors: Y. Lee and J. Yang), "Case Studies of Optimized Sequence Diagram for Program Comprehension," Graduate Research Project Competition, COE, TAMUK, April 21, 2016.
- M. Srinivasan*, (Faculty Mentors: Y. Lee and J. Yang), "Case Studies of Optimized Sequence Diagram for Program Comprehension," 7th Annual Javelina Research Symposium, TAMUK, April 19, 2016 (Faculty Mentors: Y. Lee and J. Yang).
- S. Murthy*, S. Kiran*, (Faculty Mentors: Y. Lee and J. Yang) "Web-Based Interactive Programming Environment using Static and Dynamic Visualization," Texas A&M University System 12th Annual Pathways Student Research Symposium, Oct 22-23, 2015.
- T. Kumar* and J.Yang (Faculty Mentor), "One-to-One Virtual Mentoring System (VMS) for Graduate Research Project," TAMUK, Jan 2015 – Dec 2015.
- B. Earwood*, R. Ayala*, E. Ruiz*, and J. Yang (Faculty Mentor), "One-to-One Virtual Mentoring System (VMS) for Enhancing Student Programmer's Programming Skill and Logical Thinking", 6th Annual Javelina Research Symposium, TAMUK, April 15, 2015.
- S. Murthy* and S. Kiran*, (Faculty Mentor: J. Yang and Y. Lee), "Web-Based Interactive Programming Environment using Static and Dynamic Visualization," Graduate Research Project Competition, COE, TAMUK, April 16, 2015, selected finalist,

CURRICULUM DEVELOPMENT-LEAD and COURSES TAUGHT

New Curriculum-Course Development and Lead

AI Minor open to all students at A&M-SA, prep to begin Fall 2026

- 4 required coursed offered by CSCI and 2 required courses from any two designated upper-level courses in a program regardless of major

AI Certificates, started Fall 2024

- Courses at undergraduate level: CSCI 4313 Artificial Intelligence, CSCI 4314 Big Data Systems, CSCI 4341 Machine Learning
- Courses at graduate level: CSCI 5313 Artificial Intelligence, CSCI 4315 Big Data Analytics, CSCI 5 341 Machine Learning& Deep Learning

Mobile Computing Certificate with required courses at undergraduate level, started Fall 2020

CSCI 3354 Web Application Development, CSCI 4325 Mobile App Development I (Android)

CSCI 4335 Mobile App Development II (iOS)

Cloud Computing Courses:

CSCI 5372 Cloud Computing (graduate), started Fall 2022

CETE 3372 Cloud Computing Infrastructure Security (undergraduate), started Fall 2024

Hands-on learning, integration of research, real-world applications, and interactive teaching methods, utilizing Google Cloud Platform Credits supported by Google and AWS Academy resources. Students earned Google Cloud Digital Skill Badges and AWS Practitioner Certifications in application deployment, AI/ML, networking, and security.

Internship Course, started Fall 2023

CSCI 4328 Internship in Computer Science*: Coordinate students' internship site tasks with the course enrollment for CS-Cyber students worked at Apple, AWS, Microsoft, Frost Bank, etc.*

Texas A&M University-San Antonio

Graduate Courses:

CSCI 5395 Thesis - SP25, FA24, SU24, SP24, FA23, SU23, SP23, FA22, SP22, FA21, SP21
CSCI 5372 Cloud Computing - FA25, FA24, FA23, FA22
CSCI 5343 Algorithms - SP25, SP24, SP23, SP22, SP21, SP20

Undergraduate Courses:

CETE 3370 Cloud Computing Infrastructure Security - FA25, FA24
CSCI 4359 Advanced Topics in Computer Science - FA21, SU20, FA19, SU17
CSCI 4366-3366 (Theory of) Programming Languages - FA21, FA20, FA19, FA18, FA17, FA16
CSCI 4343-3343 (Analysis of) Algorithms - SP25, SP24, SP23, SP22, SP21, SP20, SP19, SP18, SP17
CSCI 4328 Internship in Computer Science - SU25, SP25, SU24, SU23
CSCI 4325 Mobile App Development I (Android) - FA23, FA22, FA21, FA20, FA19, FA18
CSCI 3354 Web Application Development - SU21, SU20
CSCI 2436 Data Structures and Lab - SP23, SP22, FA21, SP21, SP20, FA19, SP19, FA18, SP18, FA17
CSCI 2322 Discrete Structures for Computing - SP19, FA18, SP18, FA17, FA16
CSCI 1337 Programming Fundamentals II - FA18, SP17
CSCI 1336 Programming Fundamentals I - FA16, SP17, SU17

Texas A&M University-Kingsville

Graduate Courses:

CSEN 5325 Software Engineering
CSEN 5306 Thesis
CSEN 5305 Graduate research Project
CSEN 5303 (Topic) Web Application Programming

Undergraduate Courses:

CSEN 4335 Mobile Application Programming (Android)
CSEN 4317 Software Engineering II
CSEN 3316 (formerly 4316) Software Engineering I
CSEN 3314 (formerly 4314) Database Systems
CSEN 2328 Data Structures and Algorithms
CSEN 2310 Object-Oriented Software Engineering
CSEN 2306 Object-Oriented Programming
CSEN 2304 Introduction to Computer Science
CSEN 2303 Introduction to Computing using Visual Basic and Excel

AWARDS, HONORS, AND SCHOLARSHIPS

- Travel Grant of $1,700 supported by NSF EXILE to attend the ExpandAI Leadership Workshop and SAIL (Summit for AI Institutes Leadership), October 7-10, 2024, Pittsburgh, PA.

- Travel Grant of approx. $1,000 supported by CAHSI and Microsoft to attend CAHSI and Microsoft AI Convening Meeting, Washington, DC, April 24-26, 2024.
- Certificate of Excellence, Office of Research and Health Sciences, A&M-SA, 2023, 2024.
- Faculty Champion, Mays Center for Experiential Learning & Community Engagement, 2024.
- Travel Grant of $1,200 supported by CAE (Center for Academic Excellence) in Cybersecurity Community National Center, to attend the 2023 National Cybersecurity Education Colloquium, Chicago, IL.
- Summer Research Fellowship with $10,000 award, Office of Research, A&M-SA, 2023.
- Academy Fellow for 2022-2023 Texas Academic Leadership Academy (TALA): Registration and travel expenses supported by the Provost's Office.
  Received the Certificate of Recognition and Medal for Dedication and Excellence (2023).
- Travel fund of $1,000 supported by Computing Alliance of Hispanic-Serving Institutions (CAHSI) to attend the CAHSI All Hands Meeting on February 16-17, in Phoenix, AZ.
- Inclusion of The Marquis Who's Who in America for professional integrity, outstanding achievement, and innumerable contributions to society, 2023.
- Google Cloud Credits Award (15,000 credits), Google Cloud Education Program, 2022-2024.
- Minority Serving Institutional Readiness for Federal Grant Preparation Workshop (MSI-RFP) participant, organized by the American Society for Engineering Education (ASEE), received a stipend of $1,800 for full participation in 2022.
- Advisor of the Year Award for WiCyS (Women in Cyber Security) Student Chapter, A&M-SA, 2022.
- WiCyS (Women in Cyber Security) faculty grant to attend the WiCyS 2022 Conference in Cleveland, OH, March 17-19, 2022.
- GHC (Grace Hopper Celebration) Faculty Scholarship to attend the 2021 Virtual Grace Hopper Celebration from Monday, Sep. 27 to Friday, Oct. 1, 2021
- Faculty Five Year Service Award, A&M-SA, 2021
- Travel fund supported by ASEE/NSF to attend the 2020 NSF CISE MSI Conference, Washington, DC.
- WiCyS (Women in Cyber Security) Faculty Grant to attend the 2020 WiCyS conference.
- The Malala Yousafzai Award, A&M-SA Jaguar Women Rock, 2019
- Facebook Cybersecurity Academic Scholarships for attending 2019 Facebook Developer Conference, F8, 2019 Women in Cyber Security conference, 2018 Black Hat/Def Con conference.
- Distinguished Faculty Award for Scholarly, Research, or Artistic Achievement, A&M-SA, 2018.
- Travel fund by the NSF project, "Rethinking Security in the Era of Cloud Computing" for attending the 2018 Cloud Security Curriculum Development Workshop, University of North Carolina-Chapel Hill, 2018
- College of Business's Innovation & Research Challenge Award, A&M-SA, 2017.

- Society of Women Engineers (SWE) NSF ASSIST Grant for attending 2016 Academic Leadership for Women in Engineering (ALWE)
- Non-Tenure Track Teaching Award, Center for Teaching Effectiveness, TAMUK, 2016
- TAMUK Council for Undergraduate Research (TCUR) Award, TAMUK, 2015
- Professor of the Year Award for Computer Science, Frank H. Dotterweich College of Engineering, TAMUK, 2015, 2014
- Non-Tenure Track Teaching Excellence Award Nominee, TAMUK, 2015, 2014
- Professor of the Year Award for Electrical Engineering and Computer Science Frank H. Dotterweich College of Engineering, TAMUK, 2013
- Texas A&M University System Student Recognition Award for Teaching Excellence, Texas A&M University System, 2011
- "Be All You Can Be" Award Faculty Nominee, TAMUK, 2010
- Graduate Fellowship, Computer Science & Software Engineering, Auburn University, 2001-2002
- University Scholarship, Computer Science, Hallym University, South Korea, 1989-1990.

PROFESSIONAL MEMBERSHIP

- Women in Cybersecurity (WiCyS)
- Institute of Electrical and Electronics and Engineers (IEEE)-Computer Society
- Association for Computing Machinery (ACM), ACM Digital Library, and ACM – Women
- Korean American Scientists and Engineers Association (KSEA)
- Korean Computer Scientists and Engineers Association in America (KOCSEA)

SERVICE TO PROFESSION: PROGRAM COMMITTEE AND REVIEWER

- NSF Panel Reviewer, 2024, 2023, 2022, 2021, 2019.
- Reviewer, The Journal of Supercomputing, Springer Nature SNAPP, 2025, 2023.
- Reviewer, Cryptography Journal, 2025.
- Panelist, ExpandAI Leadership Workshop and SAIL (Summit for AI Institutes Leadership), 2024.
- Reviewer, NSF Grantees Poster Session for the 2024 ASEE Annual Conference & Exposition.
- Guest Editor, Journal of Applied Sciences: Computing and Artificial Intelligence – Special Issue 'Cyber Security and Software Engineering,' 2024-current.
- Reviewer, Internal Journal of Artificial Intelligence in Education, Springer, "Effectiveness of Generative AI Tools in Computer Science and Engineering Education", 2024
- Reviewer, Electronics Journal, "A Comprehensive Literature Review on Volatile Memory Forensics," 2024
- Reviewer, Mathematics Journal, "Construction of software supply chain threat portrait based on chain perspective", 2023.

- Editorial Board member, Journal of Information Analysis, 2023-2026
- Reviewer, Journal of Information Analysis, 2023
- Program Committee, 2024 International Conference on Advanced in Computing Research, Springer Publishing.
- Associate Program Chair for the ACM SIGCSE Technical Symposium 2023 Computing Education Research (CER) Track, 2022.
- Textbook Reviewer, *Data Structures and Algorithms in Java: A Project-Based Approach* by Dan Myers, Cambridge University Press, 2022.
- Program committee and reviewer, CSJ (Cybersecurity Skills Journal) 2022 Special Issue on Evidencing Competencies: Progress from Funded Research.
- Program committee and reviewer, ACM SIGCSE (Special Interest Group in Computer Science Education), 2017-current.
- Reviewer, ACM Student Research Competition, 2021 CMD-IT/ACM Richard Tapia Celebration of Diversity in Computing Conference.
- Program committee, CSJ NICE SI 2020 (Cybersecurity Skills Journal Special Issue on NICE Cybersecurity Workforce Framework).
- Reviewer, the Manuscript "Memory Transfer Language (MTL) as a Tool for Visualization-Based-Pedagogy," ACM Transactions on Computing Education (TOCE) Journal, 2020.
- Program committee, 2020 WiCyS (Women in Cyber Security) Conference, 2020.
- Program committee and reviewer, IEEE International Conference on Software Engineering Education and Training (CSEE&T) 2018-2020.
- Reviewer, IEEE Frontiers in Education (FIE) 2016-2019.
- Reviewer, Consortium for Computing Sciences in Colleges (CCSC) South Central Region, Journal of Computing Sciences in Colleges, 2016-2020.
- Reviewer, Engineering Reports Journal, Wiley's Engineering Journal, 2019.
- Reviewer, Journal of Interactive Learning Environments, Taylor & Francis, 2019.
- Session chair, "To the Left, To the Left How Beyonc Can Help Us Develop and Deploy Secure Code," WiCyS (Women in Cyber Security) Conference, 2019.
- Session co-chair, Symposium on Software Engineering, International Conference on Computational Science and Computational Intelligence, 2018.
- Program committee and reviewer, 23rd Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE), 2018, 2017.
- Book Reviewer, "Practical Information Security – A Competency Based Education," Springer Publishing, 2017.
- Reviewer, The Society of Women Engineers (SWE), Upper-class and Graduate Scholarships, Online Scholarship Application System, 2017.
- Session chair, Programming in the First- and Second-years session, IEEE Frontiers in Education (FIE) 2016: The Crossroads of Engineering and Business, 2016

- Reviewer, 8th International Conference on University Learning and Teaching (InCULT), 2016
- Reviewer, 8th Annual Mentoring Conference Proceedings: New Perspectives in Mentoring: A Quest for Leadership Excellence & Innovation, 2015.
- Book reviewer, "Introduction to Software Engineering, Second Edition," by Ronald J. Leach, CRC Press/Taylor, and Francis Rooks Computer Science Manuscript Review, 2014.

SERVICE TO DEPARTMENT

2025 - current	Chair, Adjunct Faculty Hiring Committee-Computer Science & Cybersecurity
2023 - current	Member, Faculty Evaluation Committee for Mathematics, CEMS
2023 - current	Member, Tenure and Promotion Committee, Dept. of Computational, Engineering, and Mathematical Sciences (CEMS)
2024 - 2025	Member, Tenure Value and Standards Committee, CEMS
2023 - 2024	Member, Faculty Search Committee, Tenure Track Assistant Professor, CEMS
2018 - 2023	Chair, ABET Committee, Dept. of Computing & Cyber Security
2018 - 2023	Chair, BS-CS Program Committee, Dept. of Computing & Cyber Security
2021 - 2021	Chair, Faculty Search Committee, Tenure Track Assistant Professor of Computer Science, Dept. of Computing & Cyber Security
2019 – 2022	Faculty Advisor, WiCyS (Women in Cyber Security) Student Chapter
2016 – 2022	Faculty Advisor, ACM (Assoc. of Computing Machinery) Student Chapter
2018 – 2019	Program Coordinator, Facebook's Cyber Security Education Program
2018 - 2018	Search Committee, System Administrator for the Computing and Cyber Security and Center of Information Technology and Cyber Security
2015 – 2016	Member, Initiative Committee for M.S. in Software Engineering, TAMUK
2013 – 2016	Member, EECS Undergraduate Curriculum Committee, TAMUK
2013 – 2016	Member, EECS Recruiting Committee, TAMUK
2012 – 2016	Chair, EECS Website and Promotional Design Advisory Committee, TAMUK
2008 – 2016	Webmaster, Department of Electrical Engineering and Computer Science, TAMUK

SERVICE TO COLLEGE

2022 - current	Member, College Tenure and Promotion Committee, COAS
2025 - 2025	Hooding Faculty, Master students in Computer Science & Cybersecurity, COAS
2024 - 2024	Member, Ad-Hoc Committee for Review of Pre-Tenure Dossier, COAS
2022 - 2023	Member, Reorganization Task Force, College of Arts and Sciences (COAS)
2021 - 2023	Member, Promotion & Tenure and Faculty Evaluation Committee, COB
2020 - 2021	Member, Research Committee (Ad-Hoc), COB, A&M-SA
2019 – 2021	Member, MBA Hooding Ceremony Committee, COB, A&M-SA

2018 – 2019	Chair, College of Business Curriculum Committee, COB, A&M-SA
2017 – 2018	Member, AACSB Strategic Management & Innovation Committee, COB, A&M-SA
2017 – 2018	Member, College of Business Curriculum Committee, COB, A&M-SA
2016 – 2017	Member, College of Business Assessment Committee, COB, A&M-SA
2016 - 2016	Member, Javelina Scholarship Committee, College of Engineering, TAMUK
2014 - 2014	Member, College of Engineering Scholarship Committee, TAMUK

SERVICE TO UNIVERSITY

2023 – present	Member, Council of Principal Investigators (CPI)
2025 - 2025	Reviewer, Summer Fellow for Research Grant Writing
2025 - 2025	Judge, Oral Presentation, Student Research Symposium, A&M-SA
2024 - 2025	Organizer-Instructor, Jag-AI Training Workshops for Machine Learning and AI Fundamentals for Researchers
2024 - 2024	Organizer hosting the Southwest Cybersecurity Capabilities and Careers (SW3CS) Symposia at A&M-SA
2024 - 2024	Co-Organizer hosting the White House Office of the National Cyber Director (ONCD) for a special event about cybersecurity and workforce development
2022 - 2023	Member, Latinx Heritage Month Planning Committee
2021 - 2022	Member, NSA OnRamp II CAMP Scholarship Steering Committee, other members from TAMU, TAMU-CC, & PVAMU.
2021 - 2021	Co-Chair, NSA OnRamp II CAMP Research Steering Committee, other members from TAMU, TAMU-CC, & PVAMU.
2021 - 2021	Member, Search Committee, Workforce Development Coordinator
2018 – 2019	Member, University Curriculum Committee, A&M-SA
2017 – 2019	Member, Jaguar Tracks Curriculum Committee, A&M-SA
2019 - 2019	Member, Search Committee, Grants and Contracts Administrator (post-award)
2016 – 2017	Advisory Board for Center for Teaching and Learning (CTL), A&M-SA
2017 - 2018	Faculty Moderator, Annual Student Research Symposium, A&M-SA
2016 - 2016	Faculty Sponsor and Advisor, TAMUK ACM Student Chapter
2009 - 2016	Faculty Advisor, TAMUK SWE (Society of Women Engineers), TAMUK
2012 - 2016	Faculty Advisor, TAMUK CSA (Compute Science Association), TAMUK

SERVICE TO COMMUNITY

2025 - current	Member, AFCYBER Research Exchange Initiative among members from SA Air Force, TAMU, UT-SA, UT-EP, UT-Dallas
2024 - current	Member, The Greater San Antonio Chamber of Commerce

2019 - 2023	A&M-SA Representative, Women in Cyber Security (WiCyS)
2021 - 2022	Scholarship Board of Advisors, Texas Cyber Summit
2019 - 2022	Vice Chair, San Antonio Women In Technology (SAWIT)
2019 - 2022	A&M-SA Representative, National Center for Women & Information Technology (NCWIT)
2019	Youth Code Jam Station Leader/Helper for K-12 students with KODU Game Lab, San Antonio
2019	Judge, FBLA-PBL National Leadership Conf., Mobile App Development
2019	Judge, FBLA-PBL National Leadership Conf., Web Site Design (Final)
2017	Judge, Alamo Regional Academy of Science and Engineering (ARASE), St. Mary's University, San Antonio
2017	Judge, Science Fair, Harmony Science Academy San Antonio Charter School
2016 - 2017	Judge, Science and Engineering Fair, John Jay Science and Eng. Academy
2014 - 2016	Chair, SWE Southwest Texas Professional Section Corpus Christi
2016	Panel Speaker, GEMS conference, Moody High School, Corpus Christi, TX
2016	Judge, Team Build of the 'Challenge', Annual E-Week Challenge, TAMUK
2016, 2015	Judge, 2015 Senior Design Conference, College of Engineering
2016, 2015	Judge, EDD (Engineering Design and Dev.), Science Academy of South TX
2013 - 2014	Webmaster, Richard King High Mighty Mustang Band, Corpus Christi, TX
2010 - 2011	Webmaster, TAMUK SWE (Society of Women Engineers)
2010 - 2011	Judge, Coastal Bend BEST Robotic, Web Page Design
2010	Judge, Coastal Bend Regional History Fair, Senior Division Web Site
2009	Judge, Coastal Bend Regional History Fair, Junior Division Web Site