Jeong Yang, Ph.D. Curriculum Vitae

Director, Center for Information Technology & Cybersecurity
Professor, Computer Science
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EDUCATION

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

EMPLOYMENT & POSITION

2024-current	Director, Center for Information Technology and Cybersecurity, CEMS, College of Arts and Sciences, Texas A&M University-San Antonio
2026-current	Professor, Dept. of Computational, Engineering, & Mathematical Sciences College of Arts and Sciences, Texas A&M University-San Antonio
2021-2026	Associate Professor, Dept. of Computational, Engineering, & Mathematical Sciences College of Arts and Sciences, Texas A&M University-San Antonio
2023-2025	Program Coordinator, for Computing Programs (CSCI, CSEC, CETE, BAAS-IT) Dept. of Computational, Engineering, & Mathematical Sciences (CEMS) College of Arts and Sciences, Texas A&M University-San Antonio
2018-2025	ABET Coordinator, Dept. of Computational, Engineering, & Mathematical Sciences (COAS), Department of Computing and Cyber Security (COB)
2021-2023	Associate Chair, Department of Computing and Cyber Security College of Business, Texas A&M University-San Antonio
2016-2021	Assistant Professor, 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, Dept. 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

2026-2027 UNIDOS Leadership Institute Fellow, UNIDOS Center for HSI Community Coordination, NSF-funded Project.

2022-2023 Texas Academic Leadership Academy (TALA) Cohort 5 Academy Fellow. Received the Certificate of Recognition and Medal for Dedication and Excellence.

FUNDED EXTERNAL GRANTS

1/24-12/26 **PI, 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.

5/23-6/27 **Co- PI: 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.

10/21-9/24 **PI, 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. Abdel-Rahman, D. Delgado, Sr. Personnel: Z. Cao.

9/21-8/22 **Co-I**, **National Security Agency (NSA)**
Title: NSA OnRamp II CAMP Scholarship and Research
Amount: $25,000, with Vijay Golla (PI)

10/18-7/23 **PI, 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

10/17-9/18 **Co- PI, 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)

1/13-8/14 Senior Personnel, HRSA (Health Resources and Services Administration), "HINSTX (Health Information Network of South Texas) Rural HIT Network Development," Young Lee (PI), Valarie Bartelt (Co-PI), $775,775.

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)

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.

JOURNAL ARTICLES & BOOK CHAPTERS

- Chillimuntha, S. K., Jayasimha Hanumesh, A. G., & Yang, J. (2026). Associative vs. Distributional: Two Regimes of Backdoor Learning in LoRA-Adapted Code-Generation Models. *Journal of Cybersecurity and Privacy*, *6*(5), 146. https://doi.org/10.3390/jcp6050146.
- Cisneros, Adrian; & Yang, Jeong "Cognitive Resilience at the Edge: Hyperdimensional Computing versus Deep Learning for Hardware-Degraded RF Classification," Military Cyber Affairs, Vol. 9, Issue 1 (2026) HammerCon 2026 Edition.
- (Editorial) Lee, Y., & Yang, J. (2026). "Cyber Security and Software Engineering." *Applied Sciences*, *16*(10), 4625. https://doi.org/10.3390/app16104625.
- Y. Lee E. Diaz*, J. Yang, & B. Liu, "Enhancing Concurrency Bug Detection in Rust Programs Through LLVM IR Based Graph Visualization," High-Confidence Computing (Q1), https://doi.org/10.1016/j.hcc.2025.100377.
- R. Jonnala*, J. Yang, Y. Lee, G. Liang and Z. Cao, "Measuring and Improving the Efficiency of Python Code Generated by LLMs Using CoT Prompting and Fine-Tuning," IEEE Access (Q1), 2025 doi: 10.1109/ACCESS.2025.3585742.
- Cao, B. Kishiyama*, & J. Yang, "PrivNN: A Private and Efficient Framework for Spatial Nearest Neighbor Query Processing," Journal of Information Security and Applications (Q1), https://doi.org/10.1016/j.jisa.2025.104244.
- 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 (Q1), 2025, https://doi.org/10.3390/make7030079.
- 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 (Q1), 2025, DOI: 10.1177/08969205251355278/ ID: CRS-24-0191.R4.
- Lee, Y., Ansari, M.T., Yang, J. (2025). A Comparative Analysis of Taint Analysis Tools: Enhancing Security Through Combined Static Analysis Approaches. Security and Management, Wireless Networks, Software Engineering Research and Practice. CSCE 2025. Communications in Computer and Information Science, vol 2937. Springer, Cham. https://doi.org/10.1007/978-3-032-22208-4_21.

- J. Yang & A. Abraham*. “Analyzing the Features, Usability, and Performance of Deploying a Containerized Mobile Web Application on Serverless Cloud Platforms.” Future Internet (Q2, CiteScore Q1) 2024, 16, 475. https://doi.org/10.3390/fi16120475.
- B. Kishiyama*, Lee, Y.; Yang, J. “VulRepair’s Perfect Prediction by Leveraging the LION Optimizer.” Applied Sciences (Q2, CiteScore Q1) - Computing and Artificial Intelligence, Special Issue-Cyber Security and Software Engineering. Appl. Sci. 2024, 14(13), 5750; https://doi.org/10.3390/app14135750.
- 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, https://doi.org/10.1016/j.simpa.2024.100714.
- 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 (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 (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 (Q1), 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

- M. Solis, Y. Lee, & J. Yang, “A Concurrency-Aware Code Property Graph for Whole-Program Cross-Language Analysis,” International Conference on Software Engineering - Research Track (ICSE 2027), submitted, under review.
- M. Elsayed, K. Fulton, & J. Yang, “An Empirical Security Evaluation of LLM-Generated Cryptographic Rust Code,” International Workshop on Software Security Engineering, International Conference on Evaluation and Assessment in Software Engineering (EASE ’26), June 09–12, 2026, Glasgow, United Kingdom. ACM, New York, NY, USA. https://doi.org/10.1145/3816483.3816612.
- A. Elallaf*, Y. Zhang, Y. P. Masupalli*, J. Yang, Y. Lee, Z. Cao, and G. Liang, “MedProbCLIP: Probabilistic Adaptation of Vision–Language Foundation Model for Reliable Radiograph-Report Retrieval,” Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) Workshops, 2026, pp. 1-10.
- E. Diaz*, M. Solis*, Y. Lee, J. Yang, & D. Gandhi, “LVing: A Vulnerability Detection and Visualization Platform for Rust,” International Conference on Software Engineering 2026 Demo (ICSE '26).

- H. Wang and J. Yang, "Evaluating the Usability, Performance, and Cost-Efficiency of Deploying ML Models on Cloud Computing Platforms," *2025 9th International Conference on Cloud and Big Data Computing (ICCBDC)*, Manchester, United Kingdom, 2025, pp. 30-39, doi: 10.1109/ICCBDC67784.2025.00012.
- R. Jonnala*, G. Liang, J. Yang, & I. Alsmadi, "Exploring the Potential of Large Language Models in Public Transportation: San Antonio Case Study." 2025 AAAI (Association for the Advancement of Artificial Intelligence) Workshop .
- 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" 2025 AAAI (Association for the Advancement of Artificial Intelligence) Workshop .
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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. Yang, 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.

TECHNICAL REPORTS

- DOD VICEROY Grant Project Year 3 Annual Report was submitted to TAMU, which then was forwarded to DOW in June 2026. The report was approved by DOW.
- NSA CAE-CD (Center for Academic Excellence-Cyber Defense) Designation Annual Status Report for Academic Year 2024-2025, submitted to NSA in March 2026.
- NSF Jag-AI Grant Project Year 2 Annual Report was submitted to NSF in December 2025, approved by NSF.

- DOD VICEROY Grant Project Year 2 Annual Report was submitted to TAMU, which then was forwarded to the DOD in May 2025. The report was approved by DOD.
- NSA CAE-CD (Center for Academic Excellence-Cyber Defense) Designation Annual Status Report for Academic Year 2023-2024 was submitted to NSA in January 2025. The report was approved by NSA.
- NSF SmartSAT Grant Project Final Report was submitted to NSF in January 2025. The final report then was approved by NSF.
- NSF Jag-AI Grant Project Year 1 Annual Report was submitted to NSF in December 2024, and it was approved by NSF.
- ABET Self Study Report for Computer Science program was submitted to ABET, July 31, 2024, and it was approved by ABET.
- DOD VICEROY Grant Project Year 1 Annual Report was submitted to TAMU, which then forwarded it to the DOD in May 2024. The report was approved by the DOD.
- NSF Retain Grant Project Final Report including Evaluation Report was submitted to NSF, January 2024, and it was approved by NSF.
- ABET Readiness Review Report for Computer Science program was submitted to ABET, October 30, 2023, and it was approved by ABET.
- NSF SmartSAT Grant Project Year 2 Annual Report was submitted to NSF, September 2023, and it was approved by NSF.
- NSF SmartSAT Grant Project Year 1 Annual Report was submitted to NSF, September 2022, and it was approved by NSF.
- NSF Retain Grant Project Year 4 Annual Report including Evaluation Report was submitted to NSF, September 2022 – approved by NSF.
- NSF Retain Grant Project Year 3 Annual Report including Evaluation Report was submitted to NSF, September 2021 – approved by NSF.
- NSF Retain Grant Project Year 2 Annual Report including Evaluation Report was submitted to NSF, September 2020 – approved by NSF.
- NSF Retain Grant Project Year 1 Annual Report including Evaluation Report was submitted to NSF, September 2019 – approved by NSF.

SCHOLARSHIPS, AWARDS, AND HONORS

- Excellence in Research award with $1,000 in Tenured Faculty category, College of Arts & Sciences, 2026.
- UNIDOS Leadership Fellow with $1,000 travel award to attend UNIDOS Leadership Institute's Kickoff Workshop, NSF-funded project, California State University, Sacramento, CA, August 20-21, 2026.
- Stipend, NAIRR CAHSI faculty professional development, May-July 2026.
- Travel Support of $750, by NCAE CAE Symposium, April 14-16, 2026, Pittsburg, PA.
- Travel grant of approx. $1,000 supported by CRS (Computing Research Association) to attend NSF LEVEL UP AI Workshop, January 7-8, 2026, Phoenix, Arizona.
- Google Cloud Credits Award (30,400 credits), Google Cloud Education Program, 2022-2026.
- Travel Grant of $1,700 supported by NSF EXILE (ExpandAI Leadership Workshop) to attend the Workshop and SAIL (Summit for AI Institutes Leadership), Pittsburgh, PA, October 7-10, 2024.
- Travel Grant of approx. $1,000 supported by CAHSI (Computing Alliance of Hispanic Serving Institutions) 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.
- 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 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, Sep 18 - 22, 2023.
- Summer Research Fellowship with $10,000 award, Office of Research, A&M-SA, 2023.
- Inclusion of The Marquis Who's Who in America for professional integrity, outstanding achievement, and innumerable contributions to society, 2023.
- Travel Grant of $1,000 supported by Computing Alliance of Hispanic-Serving Institutions (CAHSI) to attend the CAHSI All Hands Meeting on February 16-17, 2023, Phoenix, AZ.
- 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.
- WiCyS (Women in Cyber Security) Faculty Grant to attend the WiCyS 2022 Conference in Cleveland, OH, March 17-19, 2022.
- Advisor of the Year Award for WiCyS (Women in Cyber Security) Student Chapter, A&M-SA, 2022.
- Faculty Five Year Service Award, A&M-SA, 2021.
- GHC (Grace Hopper Celebration) Faculty Scholarship to attend the 2021 Virtual Grace Hopper Celebration from Monday, Sep. 27 to Friday, Oct. 1, 2021
- Travel Grant 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 in Denver, CO, March12-14, 2020.
- Facebook Cybersecurity Academic Scholarships for attending 2019 Facebook Developer Conference, F8, 2019 Women in Cyber Security conference, and 2018 Black Hat/Def Con conference.
- The Malala Yousafzai Award, A&M-SA Jaguar Women Rock, 2019.
- Distinguished Faculty Award for Scholarly, Research, or Artistic Achievement, A&M-SA, 2018.
- Travel fund by 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.
- Non-Tenure Track Teaching Award, Center for Teaching Effectiveness, TAMUK, 2016.
- Society of Women Engineers (SWE) NSF ASSIST Grant for attending 2016 Academic Leadership for Women in Engineering (ALWE).
- 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.
- 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.

PROFESSIONLA DEVELOPMENT FOR RESEARCH & TEACHING AND REPRESENTATION OF A&M-SA

- Microsoft AI Tuor Houston, Houston, TX, May 28, 2026 – Microsoft support.
- CAE in Cybersecurity Community Symposium, Pittsburgh, PA, April 28-20, 2026.
- VICEORY Symposium, William & Mary, Williamsburg, Virginia, April 14-16, 2026.
- Summit for AI Institutes Leadership (SAIL), Reston VA, Oct 20-23, 2025.
- Black Hat conference sponsored by DOD VICEROY, Las Vegas, NV, Aug 2–5, 2025.
- ABET Symposium - Endless Discovery: Navigating the Path of Lifelong Learning, San Diego, CA, April 3-4, 2025.
- National Cybersecurity Education Colloquium, St. Louis, MO, Oct 9-10, 2024.
- Summit for AI Institutes Leadership (SAIL), Pittsburgh, PA, Oct 7-8, 2024.
- Completed AWS Machine Learning Bootcamp Part 1 and received the Certificate and Stipend of $500 from Standford University, 2024.

- CASHI Convening: Broadening Participation in AI meeting, Microsoft Innovation & Policy Center, Washington, DC, 2024.
- VICEROY Symposium at the University of Texas at San Antonio – DOD Cyber Workforce Strategy and Framework, Virtual Institute Best practice, 2024.
- ABET Symposium - Science Fiction to Science Fact: The Impact of AI on Higher Education, Tampa, FL, April 4-5, 2024.
- National Cybersecurity Education Colloquium, Palos Hills, IL, September 20-22, 2023.
- Texas Academic Leadership Academy (TALA) Cohort 5 meetings: University of Texas at Arlington (January 5-6, 2023) and University of Houston-Clear Lake (July 25-27, 2023).
- ABET Symposium - Building a More Resilient World, Nashville, TN, April 20-21, 2023.
- Completed Google Cloud training courses offered by Google for NSF grantees (2022) for cloud advancements on Big Data, AI, & Machine Learning, deploying applications, cloud infrastructures, storages options, and securing network & data with Google Cloud Platform.
- Attended HSI Strategic Innovation Summit Series for Advanced Research and Instruction in Artificial Intelligence and Quantum Information Sciences, received a Certificate of Completion, July 2021.
- Women in Cyber Security (WiCyS) Conference, Denver, CO, Sep 8-10, 2021.
- Hosted the Virtual San Antonio Area University Women in Tech Symposium partnered with GrayHat Cybersecurity and the Chair of SAWIT, October 30, 2020.
- Hosted the San Antonio Area Aspirations Award Ceremony organized by the National Center for Women and Information Technology (NCWIT), March 5, 2020, A&M-SA: high school winners received scholarships from the PCOE and JAGCoders project funds.
- NSF MSI (Minor Serving Institution) CISE (Computer and Information Science and Engineering) Programs meeting, February 3-5, 2020, Washington, DC.
- Hosted the annual San Antonio University Women in Technology Symposium and moderated a panel, October 11, 2019, A&M-SA.
- Facebook Developer Conference, F8, San Jose, CA, April 30 – May 1, 2019.
- Women in Cybersecurity Conference, Pittsburg, PA, March 29-30, 2019.
- Black Hat and DEFCON conferences sponsored by Facebook, Las Vegas, NV, Aug 7–12, 2018.
- Cloud Security Curriculum Development Workshop sponsored by the NSF project, "Rethinking Security in the Era of Cloud Computing" from University of North Carolina-Chapel Hill, Chapel Hill, NC, July 11-13, 2018.
- NSF Grants Conference sponsored by the Office of Research and Sponsored Programs, Detroit, MI, June 3-4, 2018.
- Cybersecurity Education Workshop by NSA & NSF, Lake Tahoe, CA, Apr 23-25, 2018.
- National Cybersecurity Curriculum Program Grant Workshop, New Orleans, LA, 2017.
- Data and Information Analytics Training at Texas Advanced Computing Center (TACC) and received a Certification of Completion, The University of Texas at Austin, 2017.
- Attended 2017 ABET Symposium and received a Certificate for Professional Development for participation, Baltimore, MD, 2017.
- Western Regional Noyce Conference (WRNC) and presented a project for a 'Lightening Round', Fresno, CA, 2017.

- Academic Leadership for Women in Engineering (ALWE) program organized by the Society of Women Engineers (SWE) and sponsored by the ASSIST Grant from the National Science Foundation (NSF), Philadelphia, PA, 2016.

COURSES TAUGHT

Texas A&M University-San Antonio

Graduate Courses:

CSCI 5395 Thesis-FA26, SP26, FA25, SP25, FA24, SU24, SP24, FA23, SU23, SP23, FA22, SP22, FA21

CSCI 5391 Graduate Seminar – SP26

CSCI 5372 Cloud Computing – FA25, FA24, FA23, FA22

CSCI 5353 Secure Software Development – SU26

CSCI 5343 Algorithms – FA26, SP26, SP25, SP24, SP23, SP22, SP21, SP20

CSEC 5300 Research Seminar – SP26

Undergraduate Courses:

CETE 3370 Cloud Computing Infrastructure Security – FA26, 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 Algorithms – FA26, SP26, SP25, SP24, SP23, SP22, SP21, SP20, SP19, SP18, SP17

CSCI 4328 Internship in Computer Science – SU26, SU25, SP25, SU24

CSCI 4325 Mobile App Development I (Android) - FA23, FA22, FA21, FA20, FA19, FA18

CSCI 3362 Operating Systems – FA26

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

MS THESIS ADVISING

Thesis Committee Chair:

- Mohamed Elsayed, MS-Computer Science, "An Empirical Security Evaluation of LLM-Generated Cryptographic Rust Code" expected graduation in December 2026.
- Gurman Marahar, "Benchmarking Rust Datasets for Security Critical Vulnerabilities," expected graduation in December 2026.
- Viveka Kumar, MS-Computer Science, "Backdoor Data Poisoning Attack & Defense on LLM-Based Rust Vulnerability Detection," graduated in May 2026.
- Nourin Shahin, MS-Computer Science, "Evaluating the Efficiency of Python Code Generated by SLMs (Small Language Models) in Greedy Algorithm," Thesis 1, Fall 2025.
- 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.
- Hongyu Wang, MS-Computer Science, "Analyzing the Usability, Performance, and Cost-Efficiency of Deploying ML Models on Cloud Computing Platforms," graduated in August 2024.
- Anoop Abraham, MS-Computer Science, "Analyzing the System Features, Usability, and Performance of a Containerized Application on Cloud Computing Systems," graduated in August 2023.
- Arlen P. MacDonald, MS-Computer Science, "Investigating Security Standards and Technologies Related to SolarWinds Breach," graduated in December 2021.

Theis Committee Member:

- Zeyad Abdelrazek, MS-Computer Science, "Cracking Unsafe Rust: A Hybrid Symbolic Execution and Fuzzing Approach," expected graduation in December 2026.
- Mark Solis, MS-Computer Science, "Advancing Intermediate Representation-Driven Graph Analysis for Detecting Concurrent Memory Vulnerabilities," graduated, August 2026.
- Syeda J. Boshra, MS-Computer Science, "Enhancing Vulnerability Detection in Rust Programs through LLVM IR Graph Representation for Machine Learning Model," graduated in May 2026
- Joshua Ibrom, MS-Computer Science, "Detect, Visualize, and Verify Rust's Weak Memory Model," Thesis 1, Fall 2025.

- Md. Imran Hasan, MS-Biology, "A Computational System Biology Approach for Unveiling Novel Drug Targets in Staphylococcus Aureus," graduated in May 2025.
- Andrew Trombley, MS-Computer Science, "How Cloud, Edge, and Mist computing affect resource allocation in VANETs," graduated in Fall 2023.

STUDENT ADVISING & MENTORING: RESEARCH PRESENTATION & PROFESSIONAL DEVELOPMENT (* indicates graduate student; ^ indicates undergraduate student.)

- Adrian Cisneros^ & Jeong Yang (Faculty Advisor): *Won second place in the Student Research Poster Competition*, 'Hyperdimensional Computing vs Deep Learning for Hardware-Degraded RF Classification. Cognitive Resilience at the Edge: Can AI Survive When the Silicon Fails?' Poster Presentation, 2026 DOW VICEROY Symposium, William & Mary University, Williamsburg, Virginia, April 14-16, 2026.
- Viveka Kumar* & Jeong Yang (Faculty Advisor): *Won second place at the Symposium* 'Backdoor Data Poisoning Attack & Defense on LLM-Based Rust Vulnerability Detection,' Poster Presentation, Student Research Symposium, April 2026, A&M-SA,
- Sai Kiran Chillimuntha* & Jeong Yang (Faculty Advisor), 'Hacking AI: Backdoor Poisoning Attacks on LLMs and Their Defense Mechanism,' Graduate Oral Presentation, Student Research Symposium, April 2026, A&M-SA, *Won third place at the Symposium.*
- Mohamed Elsayed* & Jeong Yang (Faculty Advisor), 'An Empirical Security Evaluation of LLM-Generated Cryptographic Rust Code,' Poster Presentation, Student Research Symposium, April 2026, A&M-SA, *Won third place at the Symposium*.
- Gurman Marahar* & Jeong Yang (Faculty Advisor), 'Benchmarking HALURust with an Expanded Dataset and Modern LLMs for Rust Vulnerability Detection,' Poster Presentation, Student Research Symposium, April 2026, A&M-SA.
- Adrian Cisneros^, VICEROY A&M-SA Intern: Leading and collaborating with VICEROY scholars in teams to develop strategies for preparing certifications and participating in competitions, July 2025 - current.
- Mallory Sorol^, VICEROY A&M-SA Intern: Assisting in organizing internal training sessions & skill reinforcement, and leading/collaborating with VICEROY scholars, June 2025-current.
- Nourin Shahin*, J, Yang (Faculty Advisor): *Won first place at the master's level research poster competition,* "Evaluating the Efficiency of Python Code Generated by Small Language Models in Greedy Algorithm," Poster presentation, GMiS (Great Mind in STEM) Conference, October 2-4, 2025, San Diego, CA.
- 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*, J. Yang (Faculty Advisor), "Development of SmartSAT Mobile web App - A Customizable Secure App for San Antonio Transit Pilot Project," 2022- 2023.
- 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.
- C. Barrientes^, J. Sanchez^, and J. Yang (Faculty Mentor), "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.
- M. Srinivasan*, (Faculty Mentors: Y. Lee and J. Yang), "Case Studies of Optimized Sequence Diagram for Program Comprehension," Graduate Research Project Competition, College of Engineering, 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*, J. Yang (Faculty Mentor), "Web-Based Interactive Programming Environment using Static and Dynamic Visualization," Graduate Research Project Competition, College of Engineering, TAMUK, April 16, 2015, selected as finalist.

SERVICE TO PROFESSION

- CPOC (Central Point of Contact), AWS Academy for Texas A&M University-San Antonio for, 2020-current.
- NSF Panel Reviewer, 2024, 2023, 2022, 2021, 2019.
- Reviewer, CMD-IT/ACM Richard Tapia Scholarship Application, 2026.
- Reviewer, IEEE Access, 2025-current
- Reviewer, The Journal of Supercomputing, Springer Nature SNAPP, 2026, 2025, 2023.
- Program Committee, IEEE International Conference on Artificial Intelligence Testing (IEEE AITest), 2026.

- Program Committee, IEEE International Conference on Big Data, 2026
- Reviewer, Results in Engineering Journal, 2026
- Guest Editor, Applied Sciences: Computing and Artificial Intelligence – Special Issue 'Recent Advances in Secure Software Engineering,' 2025-current.
- Guest Editor, Applied Sciences: Computing and Artificial Intelligence – Special Issue 'Cyber Security and Software Engineering,' 2024-2025.
- Program Committee, International Conference on Advanced Computing Research, Springer Publishing, 2024-current.
- Editorial Board member, Journal of Information Analysis, 2023-current.
- Reviewer, Cryptography Journal, 2025.
- Panelist, EXILE (NSF ExpandAI Leadership Workshop) and SAIL (Summit for AI Institutes Leadership), 2024.
- Reviewer, NSF Grantees Poster Session, 2024 ASEE Annual Conference & Exposition.
- 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.
- Associate Program Chair for the ACM SIGCSE Technical Symposium 2023 Computing Education Research (CER) Track, 2022.
- Textbook Reviewer and Endorsement, *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), 2017-2023.
- 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.
- 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 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 COMMUNITY

2024 - current	The Greater San Antonio Chamber of Commerce
2025 - current	A&M-SA Representative, AF Academic Exchange Initiatives
2025 - 2025	Presenter, U.S. Department of State's Flagship Exchange Initiative - International Visitor Leadership Program (IVLP), San Antonio
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
2019	Youth Code Jam Station Leader for K-12 students with KODU Game Lab, SA
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)
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

SERVICE TO UNIVERSITY

2026 - 2027	Co-Chair, Council of Principal Investigators (CPI), A&M-SA
2023 - present	Council of Principal Investigators (CPI), A&M-SA
2026 - present	AI+Work Task Force for College of Business, A&M-SA
2025 - 2026	Search Committee, Vice President for Research (VPR), A&M-SA
2025 - 2025	Reviewer, Summer Fellow for Research Grant Writing, A&M-SA
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, A&M-SA
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 & workforce development
2022 - 2023	Latinx Heritage Month Planning Committee, A&M-SA
2021 - 2022	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	Search Committee, Workforce Development Coordinator, A&M-SA
2018 – 2019	University Curriculum Committee, A&M-SA
2017 – 2019	Jaguar Tracks Curriculum Committee, A&M-SA
2019 - 2019	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 COLLEAGE

2022 - current College Tenure and Promotion Committee, COAS

2024 - current Hooding Faculty, Master students in Computer Science & Cybersecurity, COAS

2026 - 2026 Expedited Tenure Reviews for Vice President for Research (VPR) and Chair of CEMS Department

2025 - 2025 Chair, Ad-Hoc College Committee for Tenure & Promotion Review, COAS

2025 - 2026 Ad-Hoc College Committee for Pre-Tenure Review, COAS

2022 - 2023 Reorganization Task Force, College of Arts and Sciences (COAS)

2021 - 2023 Promotion & Tenure and Faculty Evaluation Committee, COB

2020 - 2021 Research Committee (Ad-Hoc), COB, A&M-SA

2019 – 2021 MBA Hooding Ceremony Committee, COB, A&M-SA

2018 – 2019 Chair, College of Business Curriculum Committee, COB, A&M-SA

2017 – 2018 AACSB Strategic Management & Innovation Committee, COB, A&M-SA

2017 – 2018 College of Business Curriculum Committee, COB, A&M-SA

2016 – 2017 College of Business Assessment Committee, COB, A&M-SA

2016 - 2016 Javelina Scholarship Committee, College of Engineering, TAMUK

2014 - 2014 College of Engineering Scholarship Committee, TAMUK

SERVICE TO DEPARTMENT

2023 - current Chair/Member, Tenure and Promotion Committee, CEMS

2023 - current Chair/Member, Faculty Annual Evaluation Committee, Dept. of Computational, Engineering, and Mathematical Sciences (CEMS)

2026 - 2026 Expedited Tenure Review Committee, Tenure review for New Chair

2024 - 2025 Chair, Adjunct Faculty Hiring Committee-Computer Science & Cybersecurity

2024 - 2025 Tenure Value and Standards Committee, CEMS

2023 - 2024 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	Initiative Committee for M.S. in Software Engineering, TAMUK
2013 – 2016	EECS Undergraduate Curriculum Committee, TAMUK
2013 – 2016	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

PROFESSIONAL MEMBERSHIP

- 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)