

Jeong Yang, Ph.D.**Curriculum Vitae**

Director of Information Technology and Cyber Security jeong.yang@tamusa.edu
 Associate Professor & Program Coordinator 210-784-2315
 Dept. of Computational, Engineering, & Mathematical Sciences Science & Technology 211R
 College of Arts and Sciences
 Texas A&M University-San Antonio

EDUCATION

Ph.D., Computer Science and Software Engineering, Auburn University, 2016
 M.S., Computer Science and Software Engineering, Auburn University, 2001
 B.S., Computer Science, Hallym University, South Korea, 1991

EMPLOYMENT & POSITION

2024-current **Director of Information Technology and Cyber Security**
 Associate Professor & Computing Programs Coordinator
 ABET Coordinator, Dept. of Computational, Engineering, & Mathematical Sciences
 College of Arts and Sciences, Texas A&M University-San Antonio

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

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

- Texas Academic Leadership Academy (TALA) Cohort 5 Academy Fellow (2022-2023)
 - Enhancing leadership capacity in academic affairs, professional development webinars & leadership plan development, EQi 360 assessment of Emotional Intelligence
 - 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
- 5/23-5/25 **PI: A&M-SA, Department of Defense (DoD) Air Force Research Lab (AFRL)**
 Title: VICEROY for NCAE-C South Central Region Consortium-VICEROY Southwest
 Amount: \$2,000,000
 Collaborators: TAMU Lead PI: Drew Hamilton, PVAMU PI: Louis 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. Abdul-Rahman, D. Delgado, Z. Cao (SP).
- 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 (NSA) 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: \$130,371.75
 With A. Lodgher (PI) & U. Bulut (SP)
- 10/14-9/20 **SP, 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 **SP, 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)

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 (* indicates a student.)

- **J. Yang & A. Abraham**, “Analyzing the System Features, Usability, and Performance of a Containerized Application on Serverless Cloud Computing Systems,” *Future Internet*, 2024, under revision.
Preprint at Research Square: <https://doi.org/10.21203/rs.3.rs-3167840/v1>.
- 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,” 2024, *Critical Sociology*, under revision
- Z. Cao, B. Kishiyama, & **J. Yang**, “PrivNN: A Private and Efficient Framework for Spatial Nearest Neighbor Query Processing,” *EEE Transactions on Privacy*, submitted, under review.
- M. Ansari; Y. Lee; **J. Yang**, “Comparative Analysis of Taint Analysis Tools: Evaluating the Efficacy in Data Flow Tracking Across Diverse Codebases,” *SN Computer Science journal*, submitted, under review.
- 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 Journal*, submitted, under review.
Preprint Available at SSRN: <http://dx.doi.org/10.2139/ssrn.4700599>
- M. Abdel-Rahman, **J. Yang**, Y. Lee, & D. Delgado, “Enhancing Sustainable Urban Mobility: Leveraging Data Analytics to Optimize Bus Schedule Adherence within the San Antonio Transit System,” 2024, *Information Systems Frontiers Journal*, submitted, under review.
- Kishiyama, B.; Lee, Y.; **Yang, J.** Improving VulRepair’s Perfect Prediction by Leveraging the LION Optimizer. *Applied Sciences Journal - Computing and Artificial Intelligence*, Special Issue-Cyber Security and Software Engineering. 2024. *Appl. Sci.* 2024, 14(13), 5750; <https://doi.org/10.3390/app14135750>.
- 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*, DOI:10.1109/ACCESS.2023.3348554.
- 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*, Vol. 30 No. 3, pp. 309-323. <https://doi.org/10.1108/ICS-05-2021-0067>.
- **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.
- E. Fountain, L*. Tawalbeh and **J. Yang**, “Predicting Volume of Vehicular Traffic Using Machine Learning,” *Issues in Information Systems*, 2020, Vol 21, Issue 3.
- **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.

- 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. Sevelia*, 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.

PEER-REVIEWED BOOK CHAPTERS (* indicates a student.)

- H. 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.
- 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.
- W. Noonan*, A. Trombly*, **J. Yang**, “Application of Linear Regression and Random Forest Models in Predicting Bus On-Time Performance,” 2022 Springer Nature Book: Transactions on Computational Science & Computational Intelligence-Advances in Data Science and Information Engineering.
- **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.
- **J. Yang**, D. Velez, H. A. Staley, D. DeLeon, & 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.
- 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.
- 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 (* indicates a student.) – *all papers listed here were also presented at the corresponding international conference.*

- **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*.
- 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 International Conference on Cloud and Big Data Computing, ACM.
- B. Han, C. Moran, **J. Yang**, Y. Lee, Z. Cao, & G. Liang, “Multi-Scale Self-Supervised Consistency Training for Trustworthy Medical Imaging Classification,” 2024 IEEE International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC).
- 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 (SERA), 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 (CSEET), 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.

MS THESIS ADVISED

- Advisor: Hongyu Wang, “Analyzing the Usability, Performance, and Cost Efficiency of Deploying ML Models in Various Cloud Computing Platforms,” graduated in August 2024.
- Advisor: Anoop Abraham, “Analyzing the System Features, Usability, and Performance of a Containerized Application on Cloud Computing Systems,” graduated in August 2023.
- Advisor: Arlen P. MacDonald, “Investigating Security Standards and Technologies Related to SolarWinds Breach,” graduated in December 2021.
- Committee member: Md. Imran Hasan – Biology Student, “A Computational System Biology Approach for Unveiling Novel Drug Targets in Staphylococcus Aureus”, expected graduation in Spring 2025.
- Committee member: Andrew Trombley, “How Cloud, Edge, and Mist computing affect resource allocation in VANETs,” graduated in Fall 2023.

STUDENT PROJECT ADVISING, MENTORING, AND POSTER PRESENTATION

- 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,
- A. Arevalo*, M. Rodriguez*, M. Martinez*, and J. Yang (Faculty Mentor), “Software: Online Mentoring Environment,” Senior Design Conference, COE, TAMUK, 2014.

COURSES TAUGHT

Texas A&M University-San Antonio

CSCI 5395 Thesis

CSCI 5372 Cloud Computing

CSCI 5343 Algorithms

CSCI 4359 Advanced Topics in Computer Science, ST: Internship in CS

CSCI 4366 (Theory of) Programming Languages

CSCI 4343 (Analysis of) Algorithms

CSCI 4328 Internship in Computer Science
 CSCI 4325 Mobile App Development I (Android)
 CSTE 3370 Cloud Computing Infrastructure Security
 CSCI 3354 Web Application Development
 CISA 3328 Internship in Computer Information Systems
 CSCI 2436 Data Structures and Lab (Programming Fundamentals III and Lab)
 CSCI 2322 Discrete Structures for Computing
 CSCI 1337 Programming Fundamentals II
 CSCI 1336 Programming Fundamentals I

Texas A&M University-Kingsville

CSEN 5325 Software Engineering
 CSEN 5306 Thesis
 CSEN 5305 Graduate research Project
 CSEN 5303 (Topic) Web Application Programming
 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 approx. \$1,000, by CAHSI and Microsoft to attend CAHSI and Microsoft AI Convening Meeting, Washington, DC, April 24-26, 2024.
- Travel Grant of \$1,200 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 by the 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, 2023.

- 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 by ASEE and 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), Women in Technology (WIT)
- 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 in 2024, 2023, 2022, 2021, 2019.
- 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
- 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, The Journal of Supercomputing, Springer Nature SNAPP, 2023
- 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 Beyond 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

2023-current	Member, Faculty Evaluation Committee for Mathematics, CEMS
2023-current	Member, Tenure and Promotion Committee, Dept. of Computational, Engineering, and Mathematical Sciences (CEMS)
2023-2024	Member, Faculty Search Committee, Tenure Track Assistant Professor
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
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, A&M-SA
2017 – 2018	Member, AACSB Strategic Management and Innovation Committee, A&M-SA
2017 – 2018	Member, College of Business Curriculum Committee, A&M-SA
2016 – 2017	Member, College of Business Assessment Committee, 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
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

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