Izzat M. Alsmadi, Ph.D.
Associate Professor
Computational, Engineering, and Mathematical Sciences (CEMS)
College of Arts and Sciences
ialsmadi@tamusa.edu

Academic Background

Ph.D. North Dakota State University.

M.S. North Dakota State University.

M.S. University of Phoenix.

B.S. Mut'ah University.

WORK EXPERIENCE

Work Experience

CCS Department Chair, Texas A&M, San Antonio (June, 2021 - Present), San Antonio, Texas.

Associate Professor, Texas A&M San Antonio (September, 2020 - Present), SAN ANTONIO, Texas.

Assistant Professor, Texas A&M University - San Antonio (August, 2016 - Present), San Antonio, Texas.

Assistant Professor, University of New Haven (September, 2015 - July, 2016), West Haven, Connecticut.

Assistant Research Professor, Boise State University (June, 2014 - September, 2015), Riyadh, Saudi Arabia.

Associate Professor, Prince Sultan University (August, 2013 - June, 2014), Riyadh, Saudi Arabia.

Assistant Professor, Yarmouk University (March, 2008 - August, 2013), Yarmouk, Jordan.

Lecturer & Research Assistant, North Dakota State University (August, 2004 - March, 2008), Fargo, North Dakota.

Lecturer (Full Time), Yarmouk University (August, 2003 - August, 2004), Yarmouk, Jordan.

TEACHING

Teaching Activities

Student Assign-Students Advised (GRAD)

2018 - *University Ranking Systems Assessment*. 1 student.

Student Assign-Supervised Research (UG)

2018 - *Gopher: Investigating a Less-Used Internet Protocol*. 1 student.

2018 - *Stock Data and Google Trends Correlation Assessment*. 1 student.

2018 - *TAMU Branches Data Analysis*. 2 students.

2018 - *Online Malware Scanner; Comparison*. 1 student.

Other Teaching Activities

2018 - *Building student teams at TAMUSA to participate on national cyber security competitions*.

INTELLECTUAL CONTRIBUTIONS

5 year Intellectual Contributions Grid

Category	Total
Articles in Refereed Journals	27
Publications in Refereed Conference Proceedings	24
Publications of Non-refereed or Invited Papers	2
Books, Monographs, Compilations, Manuals, Supplements, Chapters, Cases, Readings	3
Grants - Funded (both refereed and non-refereed)	8

Refereed Articles

Ahmad, R., Alsmadi, I., Alhamadani, W., & Tawalbeh, L. A. (2022). A Comprehensive Deep Learning Benchmark for IoT IDS. *Computers & Security, 114 (102588)*.

Ahmad, R., Alsmadi, I., Alhamdani, W., & Tawalbeh, L. (2022). A Deep Learning Ensemble Approach to Detecting Unknown Network Attacks. *Journal of Information Security and Applications*.

Alsmadi, I. M., ALJAAFARI, N., Nazzal, M., Alahmad, S., & Sawalmeh, A. (in press, 2022). Adversarial Machine Learning in Text Processing: A Literature Survey. *IEEE Access Journal*.

AlOmari, A., Idris, N., & Sabri, A. (2022). Deep reinforcement and transfer learning for abstractive text summarization: A review. *Computer Speech & Language*.

Martin, K., Rahouti, M., Ayyash, M., & Alsmadi, I. (2021). Anomaly detection in blockchain using network representation and machine learning. *Security and Privacy, Wiley*.

Otoum, I., Baklizi, M., Alsmadi, I., Otoum, A., & Alhersh, T. (2021). Challenges of Software Requirements Quality Assurance and Validation: A Systematic Literature Review. *IEEE Access Journal*.

Alhowaide, A., Alsmadi, I., & Tang, J. (2021). Ensemble detection model for IoT IDS. *Internet of Things*.

Alicea, M., & Alsmadi, I. (2021). Misconfiguration in Firewalls and Network Access Controls: Literature Review. *MDPI Future Internet*.

Ahmad, R., Alsmadi, I., Alhamdani, W., & Tawalbeh, L. (2021). Models versus Datasets: Reducing Bias through Building a Comprehensive IDS Benchmark. *MDPI Future Internet*.

Ahmad, R., Alsmadi, I., Alhamdani, W., & Tawalbeh, L. (2021). Towards building data analytics benchmarks for IoT intrusion detection. *Cluster Computing*.

Sharrab, Y., Alsmadi, I., & Sarhan, N. (2021). Towards the availability of video communication in artificial intelligence-based computer vision systems utilizing a multi-objective function. *Cluster Computing*.

Alsmadi, I. M., Dwekat, Z., Cantu, R., & Al-Ahmad, B. (2021). Vulnerability assessment of industrial systems using Shodan. *Cluster Computing*.

Taylor, Z., & Alsmadi, I. M. (2020). College Affordability and US News & World Report Rankings. *Journal of Interdisciplinary Studies in Education, 9 (1)*, 1-25.

Alsmadi, I. M., & O'Brien, M. J. (2020). How Many Bots in Russian Troll Tweets?. *Information Processing & Management, 57 (6)*, 102303.

Alsmadi, I. M., & Al-Abdullah, M. (2020). A model for reputation rank in online social networks and its applications. *International Journal of Social Network Mining 2.2, 3 (1)*, 77-98.

Najadat, H., Alaiad, A., Alasal, S. A., Mrayyan, G. A., & Alsmadi, I. (2020). Integration of Data Envelopment Analysis and Clustering Methods. *Journal of Information and Knowledge Management, 19 (01)*, 2040006.

Malkawi, R., Alsmadi, I., Aleroud, A., & Petrov, P. (2020). A firewall-adversarial testing approach for software defined networks. *Journal of Theoretical and Applied Information Technology*.

AlRamahi, M., & Alsmadi, I. (2020). Classifying Insincere Questions on Question Answering (QA) Websites: Meta-Textual Features and Word Embedding. *Journal of Business Analytics*.

Al-Abdullah, M., Alsmadi, I., AlAbdullah, R., & Farkas, B. (2020). Designing privacy-friendly data repositories: a framework for a blockchain that follows the GDPR. *Digital Policy, Regulation and Governance*.

Alsmadi, I. M., Aleroud, A., & Saifan, A. (2020). Fault-based testing for discovering SQL injection vulnerabilities in web applications. *International Journal of Information and Computer Security*.

Ahmad, R., & Alsmadi, I. (2020). Machine learning approaches to IoT security: A systematic literature review. *Internet of Things*.

Alhowaide, A., Alsmadi, I., & Tang, J. (2020). Towards the design of real-time autonomous IoT NIDS. *Cluster Computing*.

Alsmadi, I. M., Taylor, Z. W., & Childs, J. (2020). US News & World Report Best Colleges rankings: Which institutional metrics contribute to sustained stratification?. *Scientometrics*, 1-19.

Taylor, Z. W., Childs, J., Bicak, I., & Alsmadi, I. M. (2019). Is Bigger, Better? Exploring U.S. News Graduate Education Program Rankings and Internet Characteristics. *Interchange*.

Alsmadi, I. M. (2018). Cybersecurity Education Based on the NICE Framework: Issues and Challenges. *Information Systems Control Journal (IS Audit & Control Journal), 4*.

Alsmadi, I. M., Khreishah, A., & Xu, D. (2018). Network slicing to improve multicasting in HPC clusters. *Cluster Computing*, 1-14.

Al-Molegi, A., Balleste, A. M., & Alsmadi, I. M. (2018). Regions of Interest Discovering and Predicting in Smartphone Environments. *Pervasive and Mobile Computing*.

Al-Kabi, M., Alsmadi, I. M., Khasawne, R., & Wahsheh, H. (2017). Evaluating Social Context in Arabic Opinion Mining. *The International Arab Journal of Information Technology*.

Alsmadi, I. M., & Zarour, M. (2017). Google N-Gram Viewer does not Include Arabic Corpus! Towards N-Gram Viewer for Arabic Corpu. *The International Arab Journal of Information Technology*.

Aleroud, A., & Alsmadi, I. M. (2017). Identifying cyber-attacks on software defined networks: An inference-based intrusion detection approach. *Journal of Network and Computer Applications*.

Alsmadi, I. M., & Zarour, M. (2017). Online integrity and authentication checking for Quran electronic versions. *Applied Computing and Informatics*.

Al-Kabi, M. N., Al-Ayyoub, M., Alsmadi, I. M., & Wahsheh, H. A. (2016). A Prototype for a Standard Arabic Sentiment Analysis Corpus. *The International Arab Journal of Information Technology*.

Alsmadi, I. M. (2016). The Integration of Access Control Levels Based on SDN. *International Journal of High Performance Computing and Networking*.

Al-Kabi, M. N., Kazakzeh, S. A., Abu-Ata, B. M., & Alsmadi, I. M. (2015). A novel root based Arabic stemmer. *Journal of King Saud University Computer and Information Sciences*.

Alsmadi, I. M., & Zarour, M. (2015). Building an Islamic financial information system based on policy managements. *Journal of King Saud University - Computer and Information Sciences*.

Alsmadi, I. M., & Alhami, I. (2015). Clustering and Classification of Email Contents. *Journal of King Saud University Computer and Information Sciences*.

Alsmadi, I. M., Hassan, N., & Al-oqily, I. (2015). Evaluating the importance of the weight factors in DEA optimisation. *International Journal of Data Science 1.2*.

Al-Kabi, M. N., Alsmadi, I. M., & Wahsheh, H. A. (2015). Evaluation of Spam Impact on Arabic Websites Popularity. *Journal of King Saud University Computer and Information Sciences*.

Al-Ayyoub, M., Bani essa, S. M., & Alsmadi, I. M. (2015). Lexicon-based sentiment analysis of arabic tweets. *International Journal of Social Network Mining 2.2*.

Hanandeh, F. A., Alsmadi, I. M., Al-Shannag, M. Y., & Al-Daoud, E. (2015). Mobile agents modelling using UML. *International Journal of Business Information Systems*.

Alsmadi, I. M., & Xu, D. (2015). Security of Software Defined Networks: A Survey, Computers and Security, Computers & Security 53. *Computers & Security*.

Al-Nabulsi, H., Alsmadi, I. M., & Al-Jarrah, M. (2014). Textual Manipulation for SQL Injection Attacks. *International Journal of Computer Network and Information Security*.

Dabbour, M., Alsmadi, I. M., & Alsukhni, E. (2013). Efficient Assessment and Evaluation for Websites Vulnerabilities Using SNORT. *International Journal of Security and its Applications*.

Al-Ramahi, M., Alazzam, I., & Alsmadi, I. M. (2013). The Impact of Using Pair Programming: A Case Study. *International Journal of Teaching and Case Studies*.

Alsmadi, I. M. (2013). Using Mutation to Enhance GUI Testing Coverage. *Institute of Electrical and Electronics Engineers*.

Chapters, Cases, Readings, Supplements

Alsmadi, I. M., & Al-Abdullah, M. (2019). Testing Assessment of Group Collaborations in OSNs. *Emerging Research Challenges and Opportunities in Computational Social Network Analysis and Mining.*. Springer.

Books, Monographs, Compilations, Manuals

Alsmadi, I. M., & Al-Abdullah, M. (2019). *Testing Assessment of Group Collaborations in OSNs* Springer.

Alsmadi, I. M. (2019). *The NICE Cyber Security Framework Cyber Security Intelligence and Analytics* Springer.

Alsmadi, I. M., Burdwell, R. A., Aleroud, A., Wahbeh, A., & AlOmari, A. (2017). *Information Security, a CBT approach* Springer.

Alsmadi, I. M., Karabatis, G., & Aleroud, A. (2017). *Information Fusion for Cyber-Security Analytics* Springer.

Al-Rabayah, W., Khasawneh, R., Abu-shamaa, R., & Alsmadi, I. M. (2016). *Uses of Social Media for Improved Customer Retention* IGI Global.

Refereed Proceedings

AlQuraish, R., Aleroud, A., Saifan, A., Alsmadi, M., & Alsmadi, I. (2021). Generating Optimal Attack Paths in Generative Adversarial Phishing. *2021 IEEE International Conference on Intelligence and Security Informatics (ISI)*.

Omara, A., Alsmadi, I., & Aleroud, A. (2021). Generative Adverserial Analysis of Phishing Attacks on Static and Dynamic Content of Webpages. *2021 IEEE Intl Conf on Parallel & Distributed Processing with Applications, Big Data & Cloud Computing, Sustainable Computing & Communications, Social Computing & Networking (ISPA/BDCloud/SocialCom/SustainCom)*.

Alicea, M., & Alsmadi, I. (2021). Towards Automatic Rule Conflict Detection in Snort. *The International Conference on Information, Communication & Cybersecurity*.

Martin, K., Alsmadi, I., Rahouti, M., & Ayyash, M. (2020). Combining Blockchain and Machine Learning to Forecast Cryptocurrency Prices. *2020 Second International Conference on Blockchain Computing and Applications (BCCA)*.

Zarrad, A., Alsmadi, I., & Yassine, A. (2020). Mutation Testing Framework for Ad-hoc Networks Protocols. *2020 IEEE Wireless Communications and Networking Conference (WCNC)*.

Alhowaide, A., Alsmadi, I., & Tang, J. (2020). PCA, Random-Forest and Pearson Correlation for Dimensionality Reduction in IoT IDS. *2020 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS)*.

Wolfe, G., & Elnashar, A. (2020). COVID-19 Candidate Treatments, a Data Analytics Approach. *2020 Fourth International Conference on Multimedia Computing, Networking and Applications (MCNA)*.

Khamiseh, S., Alsmadi, I., & Al-Alaj, A. (2020). Deceiving machine learning-based saturation attack detection systems in SDN. *2020 IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN)*.

Al-Mubaid, H., & Alsmadi, I. (2020). Analysis and Prediction of COVID-19 Timeline and Infection Rates. *2020 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*.

Thee, J., Alsmadi, I., & Al-khateeb, S. (2020). Pro-ISIS Tweets Analysis Using Machine Learning Techniques. *2020 IEEE International Conference on Big Data (Big Data)*.

Tai, J., Alsmadi, I., Zhang, Y., & Qiao, F. (2020). Machine Learning Methods for Anomaly Detection in Industrial Control Systems. *2020 IEEE International Conference on Big Data (Big Data)*.

Alhowaide, A., Alsmadi, I., & Tang, J. (2020). An Ensemble Feature Selection Method for IoT IDS. *2020 IEEE 6th International Conference on Dependability in Sensor, Cloud and Big Data Systems and Application (DependSys)*.

Alsmadi, M., Alsmadi, I., & Alwahsheh, H. (2020). URL Links Malicious Classification Towards Autonomous Threat Detection Systems. *International Conference on Emerging Technologies and Intelligent Systems*.

AlRamahi, M., Alsmadi, I., & Davenport, J. (2020). Exploring hackers assets: topics of interest as indicators of compromise. *Proceedings of the 7th Symposium on Hot Topics in the Science of Security*.

Alsmadi, I. M., Lesli, N., & Kamhoua, C. (in press, 2019). Towards building actionable indicators of compromise based on a collaboration model. *Artificial Intelligence and Machine Learning for Multi -Domain Operations Applications*.

Alsmadi, I. M., & C, E. (in press, 2019). Using Maximum Weighted Cliques i the Detection of Sub-communities. *Proceedings of the Future Technologies Conference (FTC)*.

Albataineh, A., & Alsmadi, I. M. (in press, 2019). IoT and the risk of Internet Exposure: Risk Assessment Using Shodan Queries. *International Symposium on A World of Wireless, Mobile and Multimedia Networks (WoWMoM)*.

Zhang, Y., Qiao, F., Alsmadi, I. M., & Li, Q. (in press, 2018). Interactive Based Access Control Framework for Connected Vehicle Communication. *International Conference on Control and Automation (ICCA)*.

Alsmadi, I. M., & Zarour, M. (in press, 2018). Cybersecurity Programs in Saudi Arabia: Issues and Recommendations. *International Conference on Computer Applications & Information Security (ICCAIS)*.

Alsmadi, I. M., & Mira, F. (in press, 2018). Website Security Analysis: Variation of Detection Methods and Decisions. *Saudi Computer Society National Computer Conference*.

Alsmadi, I. M., & Taylor, Z. (in press, 2018). Examining University Rankign Metrics: Acriculating Issues of Size and Web Dependency. *International Conference of Computing and Big Data (ICCBD)*.

Alsmadi, I. M., & Zarour, M. (in press, 2018). Cybersecurity Programs in Saudi Arabia: Issues and Recommendations. *International Conference on Computer Applications & Information Security (ICCAIS)*.

Alsmadi, I. M., & Taylor, Z. (in press, 2018). Examining University Ranking Metrics: Articulating Issues of Size and Web Dependency. *International Conference of Computing and Big Data (ICCBD)*.

Alsmadi, I. M., & Mira, F. (in press, 2018). Website Security Analysis: Variation of Detection Methods and Decisions. *Saudi Computer Society National Computer Conference*.

Alsmadi, I. M., & Azab, M. (2017). A Model Based Approach for the Extraction of Network Forensic Artifacts. *Cybersecurity and Cyberforensics Conference (CCC)*.

Cho, J., Alsmadi, I. M., & Xu, D. (2016). Privacy and Social Capital in Online Social Networks. *Global Communications Conference (GLOBECOM)*.

Alsmadi, I. M., Munakami, M., & Xu, D. (2016). Model-Based Testing of SDN Firewalls: A Case Study. *Technology Student Association (TSA)*.

Alsmadi, I. M., & Aleroud, A. (2016). Identifying DoS Attacks on Software Defined Networks : A Relation Context Approach. *IEEE/IFIP Network Operations and Management Symposium*.

Alsmadi, I. M., Xu, D., & Cho, J. (2016). Interaction-Based Reputation Model in Online Social Networks. *International Conference on Information Systems Security and Privacy*.

Alsmadi, I. M., Khamaiseh, S., & Xu, D. (2016). Network Parallelization in HPC Clusters. *2016 International Conference on Computational Science and Computational Intelligence (CSCI)*.

Al Mubaid, H., & Alsmadi, I. M. (2014). Predicting Protein Subcellular Localization with Reduced Feature se. *Bioinformatics and Computational Biology*.

Zarrad, A., Alsmadi, I. M., & Al-Jalou, A. (2014). Using Big Data Methods in Opinion Mining and Sentimental Analysi. *2nd International Workshop on Big Data and Social Networking Management and Security*.

Hanandeh, F., Alsmadi, I. M., & Kwafha, M. M. (2014). Evaluating Alternative Structures for Prefix Trees. *World Congress on Engineering and Computer Science*.

Khasawneh, R. T., Wahsheh, H. A., Al-kabi, M. N., & Alsmadi, I. M. (2013). Sentiment Analysis of Arabic Social Media Content: A Comparative Study. *1st International workshop on Big Data and Social Networking Management and Security*.

Presentations of Refereed Papers

International

Alsmadi, I. M. & Aleroud, A. (2016). *Identifying DoS Attacks on Software Defined Networks : A Relation Context Approach.* IEEE/IFIP Network Operations and Management Symposium, Istanbul, Turkey.

Alsmadi, I. M., Xu, D., & Cho, J. (2016). *Interaction-Based Reputation Model in Online Social Networks.* International Conference on Information Systems Security and Privacy, Rome, Italy.

National

Alsmadi, I. M., Khamaise, S., & Xu, D. (2016). *Network Parallelization in HPC Cluster.* The 2016 international conference on computational science and computational intelligence, Las Vegas, Nevada.

Ho, J., Alsmadi, I. M., & Xu, D. (2016). *Privacy and Social Capital in Online Social Network.* Global Communications Conference (GLOBECOM), Washington, District of Columbia.

Non-Refereed Articles

Alsmadi, I. M., & Taylor, Z. W. (2019). Does Size Matter? An Evaluation of Institutional Internet Ranking Metrics. *SSRN*.

Non-Refereed Proceedings

Basic or Discovery Scholarship

Alsmadi, I. M., & O'Brien, M. J. (2020). Toward Autonomous and Collaborative Information-Credibility-Assessment Systems. *Procedia Computer Science, 168*, 118-122.

Grants

Non-competitive

2021: Alsmadi, I. M. Chancellor Research Initiative, Principal Investigator, Chancellor Research Initiative.

2018: Alsmadi, I. M. & Yang, J., JAGCoders: Build a Campus - Wide Code Development Community, Principal Investigator, San Antonio SEED Grant.

Program evaluation

2018 [Year 2 of 3]: Xu, D., Yeh, J., & Alsmadi, I. M., REU Site: Software Security, Co-Principal Investigator.

Research

2022: Texas A&M TEES SEED grant, $10,000, Cyber Ready Rural Texas
2022: Alsmadi, I. M. Cc*Team:Sweeter-Southwest Expertise In Expanding,Training,Education & Research, Co-Principal Investigator, GOV-National Science Foundation (NSF).

2018: Alsmadi, I. M., Lodgher, A., & Hurley, T., Study Online Visibility and Impact Factors of TAMU-SA Website in Comparison with A&M Institutions, Principal Investigator, Texas A&M, San Antonio Strategic Planning Seed Funds.

2017: Xu, D. & Alsmadi, I. M., Developing a Software Artifact Repository for Software Assurance Educatio, Co-Principal Investigator.

Service

2022 [Year 3 of 3]: Alsmadi, I. M. CISE-MSI: RCBP-RF: S&CC: Building a Smart Mobility Network for the San Antonio Transit to Improve Transit Service and Social Impact (SmartSAT), Co-Investigator, GOV-National Science Foundation (NSF). This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria..

Teaching

2019: Alsmadi, I. M. 10 Dell laptops for TAMUSA students to be used in training and competitions., Principal Investigator, Pryor Foundation.

2017: Barton, K. A., Alsmadi, I., Burdwell, R., Green, C., Li, J., Zang, Wanyu; Vinaja, Robert Experiential Based Learning in a Cloud-based Cyber Security Lab: Integration with NICE CyberSecurity Framework, Co-Investigator, National IA Education & Training Programs.

SERVICE

Service to the Institution

- **The initiation of all MSCS graduate programs**

  I consider the most significant service I have for the CCS department since I joined in 2016 is the initiation of all its graduate programs: MS in computer science, MS in cyber security and PhD in cyber security. While I acknowledge that few people from within and outside the department have helped me in those proposals, yet I was the main person behind creating all those three different programs. Preparing a new program is a process that is very time consuming that takes:
    - (1) lot of reading of rules and regulations specially for Texas higher education materials,
    - (2) a lot of reading related to other relevant programs and institutions, digging into public information and trying to contact different people to acquire information about those relevant, competitive or similar programs,
    - (3) time and effort to collect lots of stats related to Institutional Research (IR) in our campus and other institutions,
    - (4) Time and effort in preparing program goals, courses contents, etc.
    - (5) Time and effort to conduct meetings, prepare reports, response letters, etc. to work through the submission and review process.
- Currently, we have the MSCS program running, MS in cyber security to start next year and the PhD proposal on hold for future planning.

- **The establishment of the High Performance Computing (HPC) or research computing center and infrastructure**

  I believe that the new HPC center that will start this year will be a game changer for our institution specially in grants and research. One of the main characteristics that distinguish

R1 Universities from other ones is the existence of research computing or HPC infrastructure and research. The computing center is funded from a Counselor Research Initiative Grant (CRI) of $750,000. I was not originally on the grant or of the original scope. I came to the grant based on several challenges or issues with the initial grant and scope.

- Graduate coordinator and department chair

Currently, I am CCS department chair and graduate coordinator. I am serving my department through this time of growth and changes with several new programs and the challenges to enable those program to survive and grow. In addition to our new graduate programs, we established in the last few years two new undergraduate programs in cyber security and cyber engineering technology. I will use the graduate coordinator as one example of what types of challenges we have and my effort to bring more enrollment while maintaining the level of quality we are looking for. I became graduate coordinator after MSCS program has challenges in its early years specially in terms of enrollment. I became graduate coordinator while 2-4 students were in the program and they were taking all their courses with undergraduate students. I worked in dealing with the several challenges related to degree requirements/pre-reqs and what can work well for our students. I also investigated best ROI in marketing investment to bring international students to our program. Those efforts make gradual improvements in the program enrolments and currently we have 20-25 students, (within two years period).

- A member of the CoB Promotion and tenure, research award committees

I served on few college committees including P/T and research award committee.
As known, P/T committee is one of the committee that typically requires a lot of meetings and time to evaluate yearly evaluations in addition to applications for promotion and tenure.

- A member in the University Grievance committee

 I served one year of the faculty and students grievance committee.

- Establish and mentor two students' organizations: National

Cyber Security Associations (NCSA) and AFCEA. Our professional student clubs are very important to our students for their profiles and to get them different types and aspects of experience. As I came from professional background before education, I understand how such exposures and skills can make a difference in our students profiles or CVs, I am actively working as faculty mentor for two professional clubs or organizations in our campus focusing in cyber security which is a major sector in our department and field.

- Faculty mentor in cyber competitions

I worked with our students in several local, national or online cyber security competitions. Those competitions need meetings, skills and training beyond class times and hours. Our students can benefit well from exposures and being part of such competitions for communication, connections and also publicity. Examples of those competitions include: Panoply, CCDC, CTF, AFCEA and USCC.

Department Assignments

Department Chair
2021-2023
Graduate Coordinator
2020-2023
Member:

2018-2019: Department ABET Accreditation Committee

2017-2018: Department New Faculty Recruiting/Hiring Committee

2016-2017: Department Curriculum

College Assignments

Member:

2019-2020: College Faculty Meetings

2018-2019 – 2019-2020: Computing and Cybersecurity Faculty Meetings

2018-2019 – 2019-2020: Assurance of learning committee

2018-2019: College Faculty meetings

University Assignments

Committee Member:

2017-2018: University Faculty Annual Awards Committee

Service to the Community

- General chair for the first IEEE international conferences hosted by IEEE and Texas A&M, San Antonio
  http://intelligenttech.org/IDSTA2022/index.php
  http://intelligenttech.org/BCCA2022/index.php

We are hosting for the first time in TAMUSA and IEEE international conference. This is a service to the University the local community bringing such gatherings in our city.

Many of the researchers who apply and visit such conference are from international Universities. Accordingly, this is a good opportunity for marketing and publicity specially for our graduate programs. The effort and resources to arrange such conferences takes a long time of planning and execution. I was involved as reviewer for many conferences and as editor for many journals, but a general chair for a conference take more significant effort and time.

- Mentor for local high school students

I worked with several local student teams as faculty mentor to help students in national cyber competitions such as cyber patriots.

- Judge for local high school competitions

I participated as a judge in several local high school competitions for students in STEM majors. Being a father myself of 5 kids, 3 of them now in high schools, this gave me special passion to help students find their future careers and majors based on their passion and interests.

- Open STEM Labs for local students:

We collaborated with local high schools to enable their students utilize our labs and computing resources. This will not only benefit those students utilize our resources and spaces that they may not have, but its also a great opportunity for our department and campus to connect with local high school students. I think this will be very important and beneficial.

Service to the Profession

- Reviewer and editor for many conferences and journals

I have been involved in many conferences and journals. The two screenshots below show a sample of those reviews from two popular conference review systems.

Conference	Confirm reviews / zip papers / combine into one PDF file / upload text file with reviews / certificate	Get reminder entry / rank papers	Paper (details)	Review	Review due
BEEI 2021	☰ 📄 📄 ☁	review 📅	*An Effective Classification Approach for Big Data with Parallel Generalized Hebbian Algorithm*	*review*	Dec 27, 2021 19:59 America/Chicago
JEEIT 2021	☰ 📄 📄 ☁	review 📅	*Building a Predictive Machine Learning Model to Determine an International Program: A Case Study From Jordan Private Schools for IB Program*	*review*	Sep 15, 2021 07:59 America/Chicago
CCCI 2020	☰ 📄 📄 ☁	review 📅	*IoT Metrics Automation*	*review*	completed; can modify until Sep 28, 2020 16:59 America/Chicago
			New and Simple Offline Authentication Approach Using Time-Based One-Time Password with Biometric for Car Sharing Vehicles	*review*	
			Digital Forensic Acquisition and Analysis of Discord Applications	*review*	
WoWMoM-CCNCPS'2020	☰ 📄 📄 ☁	Workshop Review Form 📅	*Improving MAC Protocols for Wireless Industrial Networks via Packet Prioritization and Cooperation*	*Workshop Review Form*	May 28, 2020 18:59 America/Chicago
AJSE'21	☰ 📄 📄 ☁	AJSE review 📅	*Scoring Vulnerabilities After Seeing a Chained Vulnerability Demonstration*	*AJSE review*	Jun 14, 2019 18:20 America/Chicago

Conference ◆▶	Role
IDSTA2022	subreviewer author PC member (IDSTA2022)
DMIPA2020	subreviewer
CDMA2020	subreviewer PC member
AISET2019	subreviewer author
CCC 2017	subreviewer author
ICICS 2011	subreviewer author
BDSN-2014	author subreviewer
SEKE2014	subreviewer
COMPSAC 2014	subreviewer
ICICS 2013	subreviewer PC member author

- Mentor, and co-advisor for many master and PhD students in national and international Universities.

Observing my publications, I am proud to say that a significant number of my publications are with students and in most of those cases, I will have the student as the first author. That gives those students a self esteem and confidence. In many institutions, I noticed that this is not the trend and while many faculties work less with students yet they insist to be the first author and the student is second or even third (e.g. after the faculty friend, etc.). I feel strong against such issues and I think they have some ethical concerns as well.

I get a lot of random emails from students in national or international universities asking me if I can be their co-advisors or one of the committee members. I do not have previous interactions with those students or their advisors.

- Reviewer for external grants such as NSF

I have several examples of being involved as grant reviewer for large national organizations such as NSF, but also for other smaller national or international fund agencies. Most of those involvements came through my profile in the field and not through friends or connections.

- Reviewer of computing programs for accreditation

In addition to reviews of conference, and journal papers and grant proposals, I have served in reviewing IT-related programs for different accreditations. One of those recent examples is shown below to evaluate the software engineering master program in University of Detroit Mercy.

Dr. Izzat Alsmadi, Associate Professor in the Department of Computing & Cyber Security at Texas A&M University-San Antonio,

I hope this email finds you well. Your excellent reputation in the field of Software Engineering is much appreciated. On behalf of the faculty at the as an external reviewer for the Master of Science in Software Engineering program at Detroit Mercy. Should you choose to serve, you will be respo academic program review process. It requires three independent external reviewers to perform the following tasks:

We thank you in advance for your professional service. If you have any questions, please feel free to contact me using the information below.

Sincerely,

Karen M. Lee, PhD | Associate Vice President for Academic Administration
University of Detroit Mercy | 4001 W. McNichols Rd. | Detroit, MI 48221-3038
(313) 993 -1544 | leekm@udmercy.edu

Reviewer - Article / Manuscript
2020: Journal of Software Engineering and Knowledge Engineering (National).

2013: Journal of Software Engineering and Knowledge Engineering (National).

Reviewer: Conference Paper
2020: International Conference on Software Engineering and Knowledge Engineering (International).

2013: International Conference on Software Engineering and Knowledge Engineering (International).

Honors/Awards

Award
2019: Junior Scholarly Research or Artistic Achievement Award, Texas A&M University - San Antonio.

Last updated by member on 09-Aug-22 (03:38 PM)