

Sriram Chellappan

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RESEARCH INTERESTS	Primary: Socio-Technical Systems for Cybersecurity, Safety, Privacy and Smart Health Secondary: AI, Human-Computer Interaction, Computer Networks	
CURRENT APPOINTMENTS	Professor , Department of Computer Science and Engineering, University of South Florida (Aug 2020 – Present) Faculty Advisor , CyberHerd – USF’s Premier Cyber Competitions Team (Aug 2023 – Present) Academic Director of Cybersecurity Research , Cyber Florida (Sep 2022 – Present) Responsibilities at Cyber Florida: Create programs to stimulate high-impact cybersecurity research in Florida universities, Enable pathways for sustaining high-quality cybersecurity workforce in Florida, and Design community engagement activities to enable a cyber-secure Florida.	
PREVIOUS APPOINTMENTS	Associate Professor , Department of Computer Science and Engineering, University of South Florida, (Aug 2015 – July 2020). Associate/ Assistant Professor , Department of Computer Science, Missouri University of Science and Technology (Jan 2008 – July 2015).	
EDUCATION	The Ohio-State University , Columbus, OH, U.S.A. Ph.D. in Computer Science and Engineering, Dec 2007. M.S. in Electrical Engineering, Dec 2002. University of Madras , Chennai, India B.E. in Instrumentation and Controls Systems Engineering, Aug 1999.	
AWARDS	National Science Foundation CAREER Award (2013) ACM CSCW Best Paper Honorable Mention Award (2020) USF Excellence in Innovation Award (2021) Missouri S&T Faculty Excellence Award (2014), Missouri S&T Outstanding Teaching Commendation Award (2014) and Missouri S&T Faculty Research Award (2015).	
GRANT ACTIVITY SUMMARY	Total Amount Awarded: \$16,089,335 ; Shared Credit: \$6,545,931 .	
GRANTS AWARDED	Co-I (11%) - “West-Central Africa EMERGENTS International Center of Excellence in Malaria Research (ICEMR)” - National Institutes of Health - \$3,681,940 (Apr 2024 - Mar 2029). PI (50%) - “Sustainable, Hands-on and Multi-disciplinary Cybersecurity Skills Training to Meet Workforce Needs of Critical Infrastructure Sectors in Florida” - National Institute of Standards and Technology - \$200,000 (Apr 2024 - Mar 2026). PI (30%) - “Expanding the Pipeline of the Cyber/IT Workforce in the Tampa Bay Area” - Florida Department of Education - \$1,397,113 (Aug 2022 - Aug 2023). PI (100%) - “Defensewerx/ Jobwerx Internship Program” - Defensewerx - \$352,490 (Aug 2022 - Aug 2023). PI (100%) - “Defensewerx/ Jobwerx Internship Program” - Defensewerx - \$495,261 (Aug 2021 - Aug 2022).	

Co-PI (30%) - “EAGER: SaTC AI-Cybersecurity: Faking It: Facilitating Public Awareness of Cybersecurity Issues in AI” - National Science Foundation - \$300,000 (Jul 2021 - Jun 2024).

PI (100%) - “Integrating Network Forensics And Deep Learning To Enable The Blue Screen Effect” - US Special Operations Command - \$100,000 (Apr 2021 - Sep 2021).

Co-PI (37%) - “SCH: INT: Surveillance and Control of Mosquito-Borne Diseases through Automated Species Identification and Spatiotemporal Modeling” - National Science Foundation - \$900,000 (Oct 2020 - Sep 2024).

PI (100%) - “Defensewerx/ Jobwerx Internship Program” - Defensewerx - \$367,392 (Aug 2020 - Aug 2021).

Co-PI (20%) - “Secure Mobile Contact Tracing App” - Univ. of South Florida COVID-19 Rapid Response Fund - \$25000 (May 2020 - Aug 2020).

Co-PI (15%) - “A Practical and Real-time Crowd Management System through Simulating, Monitoring and Guiding Pedestrians” - Research and Developmental Office, Ministry of Education, Kingdom of Saudi Arabia - \$1,400,000 (Oct 2019 - Oct 2022).

PI (100%) - “Defensewerx/ Sofwerx/ Jobwerx Internship Program” - Defensewerx - \$343,130 (Aug 2019 - Aug 2020).

Co-PI (15%) - “Trial of Technology-Assisted Lifelong Cardiac Rehabilitation for Women (TOTAL CARE)” - Univ. of South Florida Strategic Investment Pool (SIP) - \$98,530 (Apr 2019 - Mar 2020).

Co-PI (20%) - “PFI-RP: A Multi-Disciplinary Approach to Detecting Adolescent Online Risks” - National Science Foundation - \$766,000 (Sep 2018 - Aug 2019).

PI (100%) - “EAGER: PPER: Collaborative: Cellphone-Enabled Water Citizen Science for Data and Knowledge Generation, and Sharing: WatCitSci” - National Science Foundation - \$28,000 (Nov 2017 - Oct 2019).

PI (60%) - “SaTC: CORE: Small: A Privacy-Preserving Meta-Data Analysis Framework for Cyber Abuse Research - Foundations, Tools and Algorithms” - National Science Foundation - \$530,333 (Sep 2017 - Aug 2021).

PI (100%) - “Doolittle/ Sofwerx Research Program” - Doolittle Institute - \$937,338 (Aug 2017 - Dec 2019).

PI (60%) - “I-Corps: Phone Call Passport: A Smartphone Application to Allow Free Phone Calls” - National Science Foundation - \$50,000 (Apr 2014 - Dec 2015).

PI (100%) - “EAGER: Collaborative Research: A Multi-Disciplinary Framework for Modeling Spatial, Temporal and Social Dynamics of Cyber Criminals” - National Science Foundation - \$101,248 (Sep 2013 - Aug 2015).

PI (100%) - “Developing Software for Assessing Adolescent Depression from Internet Usage” - UM Intellectual Property Fast Track II Initiative - \$19,600 (June 2013 - June 2014).

PI (100%) - “CAREER: Human Behavior Assessment from Internet Usage: Foundations, Applications and Algorithms” - National Science Foundation - \$492,409 (Feb 2013 - Jan 2019).

Co-PI (10%) - “Common Correctness for Protecting Confidentiality Critical Infrastructure Systems” - National Security Agency - \$41,788 (Oct 2012 - Sep 2013).

PI (35%) - “A Heterogeneous Secure Networking Test-Bed to Counter Explosives” - Army Research Office - \$249,978 (Sep 2012 - Aug 2014).

Co-PI (10%) - “I/UCRC: Net-Centric Software Systems Center Site at Missouri University of Science and Technology” - National Science Foundation - \$300,000 (Sep 2012 - Aug 2017).

Co-PI (16%) - “A Doctoral Program in Security and Privacy in Mobile Social Network Space” - Department of Education - \$533,000 (Sep 2012 - Aug 2015).

PI (60%) - “II-New: Infrastructure to Support Integrated Research and Education in Socially Intelligent Computing at Missouri S&T” - National Science Foundation - \$281,680 (June 2012 - May 2016).

PI (100%) - “Techniques for Secure and Privacy Preserving VANETs” - Missouri Research Board - \$13,000 (June 2012 - June 2013).

Co-PI (20%) - “Planning Grant: I/UCRC for Net-Centric Software Systems Center Site at Missouri University of Science and Technology” - National Science Foundation - \$13,000 (Feb 2012 - Jan 2014).

Co-PI (50%) - “Travel Grant for Attending 30th IEEE Symposium on Reliable Distributed Systems in Madrid, Spain” - National Science Foundation - \$10,000 (Sep 2011 - Aug 2013).

Co-PI (10%) - “Agile Systems Engineering: Investigation and exploration of immersive training technologies” - DARPA - \$119,988 (Aug 2011 - June 2012).

Co-PI (50%) - “Resilient IED Detection Sensor Networks Against Location Disclosure Attacks” - Army Research Office - \$202,527 (Aug 2010 - Aug 2013).

Co-PI (10%) - “REU Site: Research and Training Experience for Undergraduates in the Area of Sensor Computing (International Component - Supplement to NSF REU Site)” - National Science Foundation - \$20,020 (Mar 2010 - Feb 2011).

PI (100%) - “Securing Wireless Sensor Networks against Mobility-Centric Attacks” - Missouri Research Board - \$24,000 (June 2009 - June 2010).

PI (100%) - “Malware Spread in Next Generation Vehicular Networks: Modeling, Detection & Defense” - Missouri S&T University Transportation Center - \$23,448 (June 2009 - June 2010).

BOOK
CHAPTERS

2. Sriram Chellappan and Neelanjana Dutta, “Mobility in Wireless Sensor Networks”, Chapters in Advances in Computers, edited by Ali Hurson and Atif Memon, Academic Press, 2013.

1. Dong Xuan, **Sriram Chellappan** and Xun Wang, “Resilience of Structured Peer-to-Peer Systems: Analysis and Enhancement”, in Handbook on Theoretical and Algorithmic Aspects of Sensor, Ad Hoc Wireless and Peer-to-Peer Networks, edited by Jie Wu, CRC press LLC, 2004.

REFEREED
JOURNAL/
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PUBLICATIONS

43. Rudaiba Adnin, Ishrat Eliza, Ishika Tarin, Asif Banka, **Sriram Chellappan** et. al., “A COVID Story: Corresponding Perspectives Dissection for COVID-19 Pandemic”, in Journal of High-Confidence computing, 2024.

42. S.I. Rahman, S. Ahmed, T.A. Fariha, A. Mohammad, **Sriram Chellappan** et. al., “Un-supervised Machine Learning Approach for Tailoring Educational Content to Individual Student Weaknesses”, in Journal of High-Confidence computing, 2024.

41. J. Noor, M.S.I. Sakif, J.J. Mondal, M.R.A. Uday, **Sriram Chellappan** et. al., “Sherlock in OSS: A Novel Approach of Content-based Searching in Object Storage System”, in IEEE Access, 2024.

40. J. Noor, R.H. Ratul, M.S. Basher, J.A. Soumik, **Sriram Chellappan** et. al., “Secure Processing-aware Media Storage and Archival (SPMSA)”, in Future Generation Computer Systems, 2024.

39. Farhat Binte Azam, Ryan M Carney, Sherzod Kariev, Krishnamoorthy Nallan, **Sriram Chellappan** et. al., “Classifying Stages in the Gonotrophic Cycle of Mosquitoes from Images using Computer Vision Techniques”, *Scientific Reports*, 2023.
38. Ravi Sharma, Jamshidbek Mirzakhlov, Pratoool Bharti, Raj Goyal, Trine Schmidt and **Sriram Chellappan**, “A Friend in Need is a Friend Indeed: Investigating the Quality of Training Data from Peers for Auto-generating Empathetic Textual Responses to Non-Sensitive Posts in a Cohort of College Students”, accepted to appear in *ACM Journal on Computing and Sustainable Societies*, 2023.
37. Theresa M Beckie, Avijit Sengupta, Arup Kanti Dey, Kaushik Dutta, Ming Ji and **Sriram Chellappan**, “A Mobile Health Behavior Change Intervention for Women With Coronary Heart Disease: A Randomize Control Pilot Study”, in *Journal of Cardiopulmonary Rehabilitation and Prevention*, Vol. 10, Issue 1097, 2023.
36. Rudaiba Adnin, Ishita Haque, Sadia Afroze, **Sriram Chellappan**, et.al., “Focusing on the Un-focused: Corresponding Perspectives on Connectivity among Small-Scale Non-Profit Organizations Working for Street Children in Bangladesh and Their Donors”, in *ACM Journal on Computing and Sustainable Societies*, Vol. 9, Issue 22, 2023.
35. Ryan M Carney, Alex Long, Russanne Low, **Sriram Chellappan**, et.al., “Citizen science as an approach for responding to the threat of anopheles stephensi in Africa”, in *Citizen Sci Theory Pract*, Vol. 8, Issue 60, 2023.
34. Tanvir Bhuiyan, Ryan M Carney and **Sriram Chellappan**, “Artificial intelligence versus natural selection: Using computer vision techniques to classify bees and bee mimics”, in *iScience*, Vol. 8, Issue 13, 2022.
33. Ryan M Carney, Connor Mapes, Russanne D Low, Alex Long, Anne Bowser, David Durieux, Karlene Rivera, Berj Dekramanjan, Frederic Bartumeus, Daniel Guerrero, Carrie E Seltzer, Farhat Azam, **Sriram Chellappan** and John RB Palmer, “Integrating Global Citizen Science Platforms to Enable Next-Generation Surveillance of Invasive and Vector Mosquitoes”, in *Insects*, Vol. 3, Issue 8, 2022.
32. Jannatun Noor, Md Nazrul Huda Shanto, Joyanta Jyoti Mondal, Md Golam Hossain, **Sriram Chellappan** and A.B.M. Alim Al Islam, “Orchestrating Image Retrieval and Storage over A Cloud System”, in *IEEE Transactions on Cloud Computing*, 2022.
31. Md Aminur Rahman, Rayhan Rashed, Sharmin Akther Purabi, Noshin Ulfat, **Sriram Chellappan** and A.B.M. Alim Al Islam, “Dakter Bari: Introducing Intermediary to Ensure Healthcare Services to Extremely Impoverished People”, in *Proc. of the ACM on Human-Computer Interaction*, Vol. 5, Issue CSCW1, 2021
30. Arup Dey, Bharti Goel and **Sriram Chellappan**, “Context-driven detection of distracted driving using images from in-car cameras”, in *Internet of Things*, Vol. 14, 2021.
29. Sajeda Akter, **Sriram Chellappan**, Tushar Chakraborty, Taslim Khan, Ashikur Rahman and Alim Al Islam, “Man-in-the-Middle Attack on Contactless Payment over NFC Communications: Design, Implementation, Experiments and Detection”, in *IEEE Transactions on Dependable and Secure Computing (TDSC)*, 2020.
28. Avijit Sengupta, Kaushik Dutta, Theresa Beckie and **Sriram Chellappan**, “Designing a Health Coach-Augmented mHealth System for the Secondary Prevention of Coronary Heart Disease Among Women”, in *IEEE Transactions on Engineering Management*, 2020.
27. Mona Minakshi, Pratoool Bharti, Tanvir Bhuiyan, Sherzod Kariev and **Sriram Chellappan**, “A Framework based on Deep Neural Networks to Extract Anatomy of Mosquitoes from Images”, in *Scientific Reports* **10**, 13059 (2020).

26. Mona Minakshi, Tanvir Bhuiyan, Sherzod Kariev, Martha Kaddumukasa, Denis Loum, Nathanael Stanley, **Sriram Chellappan**, Peace Habomugisha, David W. Oguttu and Benjamin Jacob, “High-accuracy detection of malaria mosquito habitats using drone-based multispectral imagery and Artificial Intelligence (AI) algorithms in an agro-village peri-urban pastureland intervention site (Akonyibedo) in Unyama SubCounty, Gulu District, Northern Uganda”, in *Journal of Public Health and Epidemiology*, Vol 12/3, July 2020.
25. Avijit Sengupta, Theresa Beckie, Kaushik Dutta, Arup Dey and **Sriram Chellappan**, “A Mobile Health Intervention System for Women With Coronary Heart Disease: Usability Study”, in *JMIR Formative Research*, Vol 4/6, June 2020.
24. Farhana Shahid, Shahinul Ony, Takrim Albi, **Sriram Chellappan**, Aditya Vashistha and A.B.M. Alim Al Islam “Learning from Tweets: Opportunities and Challenges to Inform Policy Making During Dengue Epidemic”, *Proceedings of the ACM on Human-Computer Interaction (PACMHCI)*, 4, CSCW1, 2020 (**Best Paper Honorable Mention Award**).
23. Kaoutar Ben Ahmed, Bharti Goel, Pratoool Bharti, **Sriram Chellappan** and Mohammed Bouhorma, “Leveraging Smartphone Sensors to Detect Distracted Driving Activities”, in *IEEE Transactions on Intelligent Transportation Systems (T-ITS)*, Vol 20/9, Sep 2019.
22. Anthony Windmon, Mona Minakshi, Pratoool Bharti, **Sriram Chellappan**, Marcia Johanssen, Bradlee Jenkins and Ponrathi Athilingam, “TussisWatch: A Smart-phone System to Identify Cough Episodes as Early Symptoms of Chronic Obstructive Pulmonary Disease and Congestive Heart Failure”, in *IEEE Journal of Biomedical and Health Informatics (J-BHI)*, Vol 23/4, July 2019.
21. Pratoool Bharti, Debraj De, **Sriram Chellappan** and Sajal Das, “HuMAN: Complex Activity Recognition with Multi-modal Multi-positional Body Sensing”, in *IEEE Transactions on Mobile Computing (TMC)*, Vol 18/4, April 2019.
20. Pratoool Bharti, Anurag Panwar, Ganesh Gopalakrishna, and **Sriram Chellappan**, “Watch-Dog: Detecting Self-Harming Activities from Wrist Worn Accelerometers”, in *IEEE Journal of Biomedical and Health Informatics (J-BHI)*, Vol 22/3, May 2018.
19. Srinivas Thandu, Pratoool Bharti, **Sriram Chellappan** and Zhaozheng Yin, “Leveraging Multi-modal Smartphone Sensors for Ranging and Estimating the Intensity of Explosion Events”, in *Special Issue on Emerging Technologies in Pervasive Sensing, Journal of Pervasive and Mobile Computing (PMC)*, Vol 20/1, Sep 2017.
18. Debraj De, Pratoool Bharti, Sajal Das and **Sriram Chellappan**, “Multimodal Wearable Sensing for Fine-Grained Activity Recognition in Healthcare”, in *IEEE Internet Computing (IC)*, Vol 19/5, Sep-Oct 2015.
17. Muhammad Al Mutaz, Levi Malott and **Sriram Chellappan**, “Detecting Sybil Attacks in Vehicular Networks”, in *Springer Journal of Trust Management*, Vol 1/4, May 2014.
16. Mark Snyder, **Sriram Chellappan** and Mayur Thakur, “Distributed Exploratory Coverage with Limited Mobility”, in *International Journal of Space-Based and Situated Computing*, Vol 4/2, pp 114-124, 2014.
15. Tamal Paul, Jonathan Kimball, Maciej Zawodniok, Thomas Roth, Bruce McMillin and **Sriram Chellappan**, “Unified Invariants for Cyber-Physical Switched System Stability”, in *IEEE Transactions on Smart Grid (TSG)*, Vol 5/1, pp 112-120, January 2014.
14. Frances Montgomery, **Sriram Chellappan**, Raghavendra Kotikalapudi, Donald Wunsch and Karl Lutzen, “Monitoring Student Internet Patterns: Big Brother or Promoting Mental Health?”, *Journal of Technology in Human Services (JTHS)*, Vol. 31/1, pp 61-70, Spring 2013.
13. Raghavendra Kotikalapudi, **Sriram Chellappan**, Frances Montgomery, Donald Wunsch and

Karl Lutzen, “Associating Depressive Symptoms in College Students with Internet Usage Using Real Internet Data”, IEEE Technology & Society Magazine (TSM), Vol. 31/4, pp 73-80, Winter 2012.

Press Release: The New York Times, TIME, Forbes, MSNBC, Times of India, The Hindu, ScienceDaily, Slashdot, IEEE News, ACM Tech News and many more.

12. Wenjun Gu, **Sriram Chellappan**, Xiaole Bai and Honggang Wang, “Scaling Laws of Random Key Pre-distribution Protocols in Wireless Sensor Networks”, in IEEE Transactions on Information Forensics and Security (TIFS), Vol 6/4, pp 1370-1381, Dec 2011.

11. Wenjun Gu, Neelanjana Dutta, **Sriram Chellappan** and Xiaole Bai, “Providing End-to-End Secure Communications in Wireless Sensor Networks”, IEEE Transactions on Network and Service Management (TNSM), Vol 8/3, pp 205-218, Sep 2011.

10. Changqing Xu, Xiaole Bai, Lei Ding, Jin Teng, **Sriram Chellappan** and Dong Xuan, “Directed-Coverage in Wireless Sensor Networks: Concept and Quality”, in Ad Hoc & Sensor Wireless Networks (AHSWN), Vol 11/3/4, pp 173-197, June 2011.

9. Wei Yu, **Sriram Chellappan**, XunWang and Dong Xuan, “Peer-to-Peer System-based Active Worm Attacks: Modeling, Analysis and Defense”, in Elsevier Journal of Computer communications (COMCOM), Vol 31/ 17, pp 4005-4017, Nov 2008.

8. Wenjun Gu, Xiaole Bai, **Sriram Chellappan** and Dong Xuan, “Network Decoupling: A Methodology for Secure Communications in Wireless Sensor Networks”, in IEEE Transactions on Parallel and Distributed Systems (TPDS), Vol. 18, No. 12, Dec. 2007, pp 1784 - 1796.

7. **Sriram Chellappan**, Wenjun Gu, Xiaole Bai, Dong Xuan, Bin Ma and Kaizhong Zhang “Deploying Wireless Sensor Networks under Limited Mobility Constraints”, in IEEE Transactions on Mobile Computing (TMC), Vol. 6, No. 10, Oct. 2007, pp 1142 - 1157.

6. **Sriram Chellappan**, Xiaole Bai, Bin Ma, Dong Xuan and Changqing Xu, “Mobility Limited Flip-based Sensor Networks Deployment”, in IEEE Transactions on Parallel and Distributed Systems (TPDS), Vol. 18, No. 2, Feb. 2007, pp 199 - 211.

5. Xun Wang, **Sriram Chellappan**, Philip Corey Boyer and Dong Xuan, “On the Effectiveness of Secure Overlay Forwarding Systems under Intelligent Distributed DoS Attacks”, in IEEE Transactions on Parallel and Distributed Systems (TPDS), Vol. 17, No. 7, June. 2006, pp. 619-632.

4. Arjan Durresi, Praveen Kandikuppa, Mukundan Sridharan, **Sriram Chellappan**, Leonard Barolli and Raj Jain, “LED: Load Early Detection: A Congestion Control Algorithm based on Router Traffic Load,” in Journal of Information Processing Society of Japan (IPSJ), Vol. 47, No. 2, Feb. 2006, pp. 94 - 107.

3. Xun Wang, Wenjun Gu, Kurt Schosek, **Sriram Chellappan** and Dong Xuan, “Sensor Network Configuration under Physical Attacks”, in International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), Inderscience, Vol. 3619/2005, Jan. 2006, pp. 23-32.

2. Wei Yu, **Sriram Chellappan**, Dong Xuan and Wei Zhao, “Distributed Policy Processing in Active-Service based Infrastructures”, in International Journal of Communication Systems (IJCS), John Wiley and Sons, Vol. 19, Issue 7, May. 2005, pp. 727-750.

1. Wei Yu, **Sriram Chellappan** and Dong Xuan, “P2P/ Grid-based Overlay Architecture to Support VoIP Services in Large Scale IP Networks”, in Journal of Future Generation Computer Systems (FGCS), Elsevier, Vol. 21, No. 1, Jan. 2005.

72. Hye-Seon Yi, Tanvir Bhuiyan and **Sriram Chellappan**, “Integrating Computer Vision and Crowd Sourcing to Infer Drug Use on Streets: A Case Study with 311 Data in San Francisco”, in Proc. of International Conference on Intelligent Edge Processing in the IoT Era, Nov 2022.

71. Ishrat Jahan Eliza, Md Hasibul Husain Hisham, Mohammad Nuwaisir Rahman, Ajwad Akil, Abir Mohammad Turza, Fahim Morshed, Nazmus Sakib, **Sriram Chellappan**, ABM Alim Al Islam, “Note: CORONOSIS: Corona Prognosis via a Global Lens to Enable Efficient Policy-making Both at Global and Local Levels”, in Proc. of ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS), 2022.
70. Jamshidbek Mirzakhlov, Anoop Babu, Duygu Ataman, Sherzod Kariev, **Sriram Chellappan**, et al. “A Large-Scale Study of Machine Translation in Turkic Languages”, in Proc. of Conference on Empirical Methods in Natural Language Processing (EMNLP), Nov 2021.
69. Jamshidbek Mirzakhlov, Anoop Babu, Aigiz Kunafin, **Sriram Chellappan**, et al. “Evaluating Multiway Multilingual NMT in the Turkic Languages”, in Proc. of 6th Conference on Machine Translation (WMT), Nov 2021.
68. Ravi Sharma, Sri Divya Pagadala, Pratoool Bharti, **Sriram Chellappan**, Trine Schmidt and Raj Goyal, “Assessing COVID-19 Impacts on College Students via Automated Processing of Free-form Text”, in Proc. of 14th International Conference on Health Informatics (HealthInf), Feb 2021.
67. Hye-Seon Yi and **Sriram Chellappan**, “Computer Vision Assisted Approaches to Detect Street Garbage from Citizen Generated Imagery”, in Proc. of International Summit Smart City 360°, Dec. 2020.
66. Saiful Salim, Adnan Quaium, **Sriram Chellappan** and Alim Al Islam, “Enhancing Fidelity of Quantum Cryptography using Maximally Entangled Qubits”, in Proc. of IEEE Global Communications Conference (GLOBECOM), Taipei, Dec 2020.
65. Arup Dey, Bharti Goel and **Sriram Chellappan**, “Detecting Distracted Driving from Images by Processing Relative Locations of Objects of Interest inside Vehicles”, in Proc. of 15th International Conference on Broadband and Wireless Computing, Communication and Applications (BWCCA), Yonago, Oct 2020.
64. Bharti Goel, Giovanni Luca Ciampaglia and **Sriram Chellappan**, “Impact of False Reporting Attacks in Privacy-preserving Contact Tracing”, in Proc. of The International School and Conference on Network Science (NetSci), Sep 2020.
63. Mona Minakshi, Pratoool Bharti, Willie McClinton III, Jamshidbek Mirzakhlov, Ryan Carney and **Sriram Chellappan**, “Automating the Surveillance of Mosquito Vectors from Trapped Specimens Using Computer Vision Techniques”, in ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS), Guayaquil, June 2020.
62. Dzung Tran, Si Dang, Tancel Yucelen and **Sriram Chellappan**, “An Experiment on Vision-Based Leader-Following for Multiagent Systems”, in Proc. of AAAI Science and Technology Forum and Exposition (SciTech), Orlando, Jan 2020.
61. Meghna Chaudhary, Ravi Sharma and **Sriram Chellappan**, “Pairing Users in Social Media via Processing Meta-data from Conversational Files”, in Proc. of International Conference on Big Data Analytics (BDA), Ahmedabad, Dec 2019.
60. Atanu Shome, Md. Mizanur Rahman, **Sriram Chellappan** and A.B.M. Alim Al Islam, “A Generalized Mechanism beyond NLP for Real-Time Detection of Cyber Abuse through Facial Expression Analytics”, in Proc. of 16th ACM/EAI International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), Houston, Nov 2019.
59. Md. Mizanur Rahman, Atanu Shome, **Sriram Chellappan** and A.B.M. Alim Al Islam, “How Smart Your Smartphone Is in Lie Detection?”, in Proc. of 16th ACM/EAI International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), Houston, Nov 2019.

58. Mazharul Islam, Novia Naurin, Mohammad Kaykobad, **Sriram Chellappan** and A.B.M. Alim Al Islam, "HEliOS: Huffman Coding Based Lightweight Encryption Scheme for Data Transmission", in Proc. of 16th ACM/EAI International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), Houston, Nov 2019.
57. Pratoool Bharti, Arup Dey, **Sriram Chellappan** and Theresa Beckie, "An Experimental Investigation Comparing Age-Specific and Mixed-Age Models for Wearable Assisted Activity Recognition in Women", in Proc. of 12th International Conference on Health Informatics (HealthInf), Prague, Czech Republic, Feb 2019.
56. Jesse Jaramillo, Tyler Wiecek, Dzung Tran, Venkata Dadi, Tancel Yucelen and **Sriram Chellappan**, "Experimental Validation of a Distributed Control Approach Based on Multiplex Networks on Formations of Unmanned Aerial Vehicles", in Proc. of AAAI Science and Technology Forum and Exposition (SciTech), San Diego, Jan 2019.
55. Adel Alshehri, Wainella Isaacs, Aseel Addawood, Maya Trotz and **Sriram Chellappan**, "Predicting Community Engagement on Twitter on Environmental Health Hazards", in Proc. of International Workshop on Semantic Computing for Social Networks and Organization Sciences, in conjunction with 13th IEEE International Conference on Semantic Computing (ICSC), Newport Beach, Jan 2019.
54. Jannatun Noor, Md. Golam Hossain, Muhammad Ahad Alam, Ashraf Uddin, **Sriram Chellappan** and A. B. M. Alim Al Islam, "svLoad: An Automated Test-Driven Architecture for Load Testing in Cloud Systems", in Proc. of IEEE Global Communications Conference (GLOBECOM), Abu Dhabi, Dec 2018.
53. Zaheen Mustakin, Saad Manzur, Tanzila Choudhury, Farzana Rahman, **Sriram Chellappan** and A. B. M. Alim Al Islam, "Super-savior: An Independent Open Platform Wearable for Generating Emergency Alarms", in Proc. of 5th IEEE International Conference on Networking, Systems and Security (NSysS), Dhaka, Dec 2018.
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51. Mona Minakshi, Pratoool Bharti and **Sriram Chellappan**, "Leveraging Smart-Phone Cameras and Image Processing Techniques to Classify Mosquito Species", in Proc. of 15th ACM/EAI International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), New York City, Nov 2018.
50. Soheil Sarmadi, Mingyang Li and **Sriram Chellappan**, "A Statistical Framework to Forecast Duration and Volume of Internet Usage Based on Pervasive Monitoring of NetFlow Logs", in Proc. of 32nd IEEE International Conference on Advanced Information Networking and Applications (AINA), Krakow, May 2018.
49. Bharti Goel, Arup Kanti Dey, Pratoool Bharti, Kaoutar Ben Ahmed and **Sriram Chellappan**, "Detecting Distracted Driving Using a Wrist-Worn Wearable", in Proc. of Workshop on Sensing Systems and Applications Using Wrist Worn Smart Devices (WristSense) in conjunction with IEEE Intl. Conf. on Pervasive Computing and Communications (PerCom), Athens, March 2018.
48. Anthony Windmon, Mona Minakshi, **Sriram Chellappan**, Ponrathi R. Athilingam, Marcia Johansson and Bradlee A. Jenkins, "On Detecting Chronic Obstructive Pulmonary Disease (COPD) Cough Using Audio Signals Recorded from Smart-Phones", in Proc. of 11th International Conference on Health Informatics (HealthInf), Funchal, Portugal, Jan 2018.
47. Soheil Sarmadi, Mingyang Li and **Sriram Chellappan**, "On the Feasibility of Profiling Internet Users based on Volume and Time of Usage", in Proc. of IEEE Latin-American Conference on

Communications (LatinCom), Guatemala City, Nov 2017.

46. Bharti Goel, Arup Dey and **Sriram Chellappan**, “Detecting Routes Taken by Users on Public Vehicles From their Wearables”, in Proc. of IEEE Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Vancouver, Oct 2017.

45. Sajeda Akter, Tushar Chakraborty, Taslim Khan, **Sriram Chellappan** and Alim Al Islam, “Can You Get into the Middle of NFC?”, in Proc. of IEEE Conference on Local Computer Networks (LCN), Singapore, Oct 2017.

44. Mona Minakshi, Pratoool Bharti, and **Sriram Chellappan**, “Identifying Mosquito Species using Smart-Phone Cameras”, in Proc of European Conference on Networks and Communications (EuCNC), Oulu, Finland, June 2017.

43. Francesco Restuccia, Sajal K. Das, Srinivas Thandu and **Sriram Chellappan**, “RescuePal: a Smartphone-based System to Discover People in Emergency Scenarios”, in Proc. of 5th Intl. Workshop on Internet of Things, Smart Objects and Services in conjunction with IEEE Intl. Symposium on A World of Wireless, Mobile and Multimedia Networks (WoWMoM), Coimbra, Portugal, June 2016.

42. Anurag Panwar, Mariam Al-Lami, Pratoool Bharti, **Sriram Chellappan** and Joel Burken., “Determining the Effectiveness of Soil Treatment on Plant Stress using Smart-phone Cameras”, in Proc. of IEEE Intl. Conf. on Selected Topics in Mobile and Wireless Networking (MoWNet), Cairo, Egypt, April 2016.

41. Srinivas Thandu, **Sriram Chellappan** and Zhaozheng Yin, “Ranging Explosion Events Using Smartphones”, in Proc. of IEEE Intl. Conf. on Wireless and Mobile Computing, Networking and Communications (WiMob), Abu Dhabi, Oct 2015.

40. Srinivas Thandu, Levi Malott, Pratoool Bharti and **Sriram Chellappan**, “On the Feasibility of Leveraging Smartphone Accelerometers to Detect Explosion Events”, in Proc. of IEEE Intl. Conf. on Mobile Data Management (MDM), Pittsburgh, June 2015.

39. **Sriram Chellappan**, “Mining Digital Data for Smarter Mental Healthcare”, Invited Paper in Proc. of Intl. Conf. on Collaboration Technologies and Systems (CTS), Atlanta, June 2015.

38. Levi Malott, Pratoool Bharti, Nicholas Hilbert, **Sriram Chellappan** and Ganesh Gopalakrishna, “Detecting Self-harming Activities with Wearable Devices”, in Proc. of Workshop on Sensing Systems and Applications Using Wrist Worn Smart Devices (WristSense) in conjunction with IEEE Intl. Conf. on Pervasive Computing and Communications (PerCom), St. Louis, March 2015.

37. Ashish Choudhari, Harini Ramaprasad, **Sriram Chellappan**, Bruce McMillin, Jonathan Kimball and Maciej Zawodniok, “Adaptive Scheduling with Explicit Congestion Notification in a Cyber-Physical Smart Grid System”, in Proc. of Euromicro Conference series on Software Engineering and Advanced Applications (SEAA), Verona, Aug 2014.

36. Levi Malott and **Sriram Chellappan**, “Investigating the fractal nature of individual user NetFlow data”, in Proc. of Workshop on Hot Topics in Big data and Networking (Hot-Data), in conjunction with IEEE Intl. Conf. on Computer Communications and Networks (ICCCN), Shanghai, Aug 2014.

35. Jake Bielefeldt and **Sriram Chellappan**, “Sensor Authentication in Collaborating Sensor Networks”, in Proc. of IEEE IFIP Annual Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net), Piran, June 2014.

34. Sai Preethi Vishwanathan, Levi Malott, **Sriram Chellappan** and P. Murali Doraiswamy, “An Empirical Study on Symptoms of Heavier Internet Usage among Young Adults”, to appear in Proc. of IEEE Intl. Conf. on Advanced Networks and Telecommunication Systems (ANTS), Chennai, Dec

2013.

Press Release: ScienceDaily, MedicalDaily and many more.

33. Levi Malott, Sai Preethi Vishwanathan and **Sriram Chellappan**, “Differences in Internet Usage Patterns with Stress and Anxiety among College Students”, to appear in Proc. of IEEE Intl. Conf. on e-Health Networking, Applications and Services (HealthCom), Lisbon, Oct 2013.

32. Mark Snyder, **Sriram Chellappan** and Mayur Thakur, “Exploratory Coverage in Limited Mobility Sensor Networks”, in Proc. of Intl. Conf. on Network Based Information Systems (NBIS), Gwangju, Sep 2013.

31. Muhammad Al Mutaz, Levi Malott and **Sriram Chellappan**, “Leveraging Platoon Dispersion for Sybil Detection in Vehicular Networks”, in Proc. of IEEE Intl. Conf. on Privacy, Security and Trust (PST), Tarragona, July 2013.

30. Neelanjana Dutta and **Sriram Chellappan**, “A Time-series Clustering Approach for Sybil Attack Detection in Vehicular Ad hoc Networks”, in Proc. of Intl. Conf. on Advances in Vehicular Systems, Technologies and Applications (Vehicular), Nice, July 2013.

29. Ashish Choudhuri, Harini Ramaprasad, Tamal Paul, Jonathan Kimball, Maciej Zawodniok, Bruce McMillin and **Sriram Chellappan**, “Stability of a Cyber-Physical Smart Grid System using Cooperating Invariants”, in Proc. of IEEE Intl. Computer Software & Applications Conf. (COMP-SAC), Kyoto, July 2013.

28. Vamsi Paruchuri, R.B. Lenin and **Sriram Chellappan**, “Arrival time based Traffic Signal Optimization for Intelligent Transportation Systems”, in Proc. of IEEE Advanced Information Networking and Applications Conf. (AINA), Barcelona, Mar 2013.

27. Gerry Howser, **Sriram Chellappan** and Vamsi Paruchuri, “Vehicle Path Verification using Wireless Sensor Networks”, in Proc. of International Workshop on Heterogeneous Wireless Networks (HWISE) in conjunction with IEEE Advanced Information Networking and Applications Conf. (AINA), Barcelona, Mar 2013.

26. Nayot Poolsappasit, Vimal Kumar, Sanjay Madria and **Sriram Chellappan**, “Challenges in Secure Sensor-Cloud Computing”, in 8th Workshop on Secure Data Management (SDM) in conjunction with 37th Intl. Conf. on Very Large Data Bases (VLDB), Seattle, Aug 2011.

25. Neelanjana Dutta, Raghavendra Kotikalapudi, Abhinav Saxena and **Sriram Chellappan**, “A Multi-tiered Architecture for Content Retrieval in Mobile Peer-to-Peer Networks”, Short Paper in 12th Intl. Conf. on Mobile Data Management (MDM), Lulea, June 2011.

24. Jason Barnes, Vamsi Paruchuri and **Sriram Chellappan**, “On Optimizing Traffic Signal Phase Ordering in Road Networks”, in Intl. Workshop on Issues in Computing over Emerging Mobile Networks in conjunction with Proc. of 29th IEEE Symposium on Reliable Distributed Systems (SRDS), Delhi, Nov. 2010.

23. Neelanjana Dutta, Abhinav Saxena and **Sriram Chellappan**, “Defending Wireless Sensor Networks Against Adversarial Localization”, accepted as Invited Paper in Intl. Workshop on Mobile P2P Data Management, Security and Trust (MP-DMST) in conjunction with Proc. of Intl. Conf. on Mobile Data Management (MDM), Kansas City, May 2010.

22. Xiaole Bai, Lei Ding, Jin Teng, **Sriram Chellappan**, Changqing Xu and Dong Xuan, “Directed Coverage in Wireless Sensor Networks: Concept and Quality”, in Proc. of IEEE Intl. Conf. on Mobile, Ad-hoc and Sensor Systems (MASS), Macau, Oct. 2009.

21. Mark Snyder, **Sriram Chellappan** and Vamsi Paruchuri, “Event Coverage in Sparse Mobile Sensor Networks”, in Proc. of Intl. Conf. on Network-Based Information Systems (NBIS), Indianapolis, Aug. 2009.

20. Pavan Roy Marupally, Vamsi Paruchuri, and **Sriram Chellappan**, “Privacy Preserving Portable Health Record (P3HR)”, in Proc. of Intl. Conf. on Network-Based Information Systems (NBIS), Indianapolis, Aug. 2009.
19. Cyriac Kandoth and **Sriram Chellappan**, “Angular Mobility Assisted Coverage in Directional Sensor Networks”, in Intl. Workshop on Emergent Mobile Networks, in Proc. of Intl. Conf. on Network-Based Information Systems (NBIS), Indianapolis, Aug. 2009.
18. Xiaole Bai, Wenjun Gu, **Sriram Chellappan**, Xun Wang, Dong Xuan and Bin Ma, “PAS: Predicate-based Authentication Services Against Powerful Passive Adversaries”, in Proc. of Annual Computer Security Applications Conf. (ACSAC), Anaheim, Dec. 2008.
17. Vamsi Paruchuri, Arjan Duresi and **Sriram Chellappan**, “TTL based Packet Marking for IP Traceback”, in Proc. of IEEE Global Communications Conference (Globecom), New Orleans, Dec. 2008.
16. **Sriram Chellappan**, Vamsi Paruchuri, Dylan McDonald and Arjan Duresi, “Localizing Sensor Networks in Un-Friendly Environments”, in Proc. of IEEE Military Communications Conference (MILCOM), San Diego, Nov. 2008.
15. Vamsi Paruchuri, Arjan Duresi and **Sriram Chellappan**, “Secure Communications over Hybrid Military Networks“ in Proc. of IEEE Military Communications Conference (MILCOM), San Diego, Nov. 2008.
14. Wenjun Gu, Xiaole Bai, **Sriram Chellappan** and Dong Xuan, “Network Decoupling for Secure Communications in Wireless Sensor Networks”, in Proc. of IEEE International Workshop on Quality of Service (IWQoS), June 2006.
13. Xun Wang, **Sriram Chellappan**, Wenjun Gu, Wei Yu and Dong Xuan, “Policy-driven Physical Attacks in Sensor Networks: Modeling and Measurement”, in Proc. of IEEE Wireless Communications and Networking Conference (WCNC), April 2006.
12. **Sriram Chellappan**, Xiaole Bai, Bin Ma and Dong Xuan, “Sensor Network Deployment using Flip-based Sensors”, in Proc. of IEEE Mobile Sensor and Ad-hoc and Sensor Systems (MASS), Nov. 2005.
11. Wenjun Gu, Xun Wang, **Sriram Chellappan**, Dong Xuan and Ten H. Lai, “Defending against Search-based Physical Attacks in Sensor Networks”, in Proc. of IEEE Mobile Sensor and Ad-hoc and Sensor Systems (MASS), Nov. 2005.
10. Wei Yu, **Sriram Chellappan**, Xun Wang and Dong Xuan, “On Defending Peer-to-Peer System-based Active Worm Attacks”, in Proc. of IEEE Global Telecommunications Conference (GLOBECOM), Nov. 2005.
9. Xun Wang, **Sriram Chellappan**, Wenjun Gu, Wei Yu and Dong Xuan, “Search-based Physical Attacks in Sensor Networks”, in Proc. of IEEE International Conference on Computer Communication and Networks (ICCCN), Oct. 2005.
8. Xun Wang, Wenjun Gu, Kurt Schosek, **Sriram Chellappan** and Dong Xuan, “Sensor Network Configuration under Physical Attacks”, in Proc. of IEEE International Conference on Computer Networks and Mobile Computing (ICCNMC), Aug. 2005.
7. Arjan Duresi, Mukundan Sridharan, **Sriram Chellappan**, Raj Jain, Hitai Ozbai and Leonard Barolli, “Control Theory Optimization of MECN in Satellite Networks”, in Proc. of IEEE International Conference on Distributed Computing Systems Workshops (ICDCS- MNSA), June 2005.
6. Wei Yu, Philip Coyer Boyer, **Sriram Chellappan** and Dong Xuan, “Peer-to-Peer System-based Active Worm Attacks: Modeling and Analysis”, in Proc. of IEEE International Conference on

Communications (ICC), May 2005.

5. Xun Wang, Wenjun Gu, Kurt Schosek, **Sriram Chellappan** and Dong Xuan, “Lifetime Optimization of Sensor Networks under Physical Attacks”, in Proc. of IEEE International Conference on Communications (ICC), May 2005.

4. Dong Xuan, **Sriram Chellappan**, Xun Wang and Shengquan Wang, “Analyzing the Secure Overlay Services Architecture under Intelligent DDoS Attacks”, in Proc. of IEEE International Conference on Distributed Computing Systems (ICDCS), March 2004.

3. Dong Xuan, **Sriram Chellappan** and Muralidhar Krishnamoorthy, “RChord: An Enhanced Chord System Resilient to Routing Attacks”, in Proc. of IEEE International Conference on Computer Networks and Mobile Computing (ICCNMC), Oct 2003.

2. Arjan Durresi, Mukundan Sridharan, **Sriram Chellappan**, Hitay Ozbay, and Raj Jain, “Tuning RED in Satellite Networks Using Control Theory”, in Proc. of SPIE Internet Quality of Service, (ITCOMM), Sep 2003.

1. Pierre Quet, **Sriram Chellappan**, Arjan Durresi, Mukundan Sridharan, Hitay Ozbay and Raj Jain, “Guidelines for optimizing Multi-Level ECN, using fluid flow based TCP model”, in Proc. of SPIE Internet Quality of Service, (ITCOMM), July 2002.

PATENTS AWARDED

1. **Sriram Chellappan**, Pratoool Bharti, Mona Minakshi, Willie McClinton and Jamshidbek Mirzakhlov, “Leveraging smart-phone cameras and image processing techniques to classify mosquito genus and species”, US Patent US20210166078A1.

2. **Sriram Chellappan**, Mona Minakshi, Jamshidbek Mirzakhlov, Sherzod Kariev and Willie McClinton, “Systems and methods of entomology classification based on extracted anatomies”, US Patent US11048928B1.

3. **Sriram Chellappan**, Balaji Padmanabhan, Tanvir Hossain Bhuiyan, Arup Kanti Dey and Shaminur Rahman, “Methods and systems of authenticating of personal communications ”, US Patent US20200322331A1.

4. Jean-Francois Biasse, William Youmans, **Sriram Chellappan**, Nathan Fisk and Noyem Khan, “Anonymity preserving data collection using homomorphic encryption”, US Patent US20210303728A1.

MENTORING ACTIVITIES

One of two official mentors for **Willie McClinton III** in his **successful application** for the **Barry M. Goldwater** Scholarship in 2019. The Goldwater Scholarship is considered to be “the most prestigious undergraduate scholarship given in the natural sciences, engineering and mathematics”.

INVITED TALKS/ PANELS/ TUTORIALS

“**AI Assisted Methods to Enhance Mosquito Vector Surveillance**”

- University of Jaffna, Sri Lanka, (June 2023).

“**Scalable AI assisted Surveillance of Mosquito Vectors**”

- Sangam Conference, IIT Mumbai, India, (June 2023).

“**AI-enabled Citizen Science Surveillance for *stephensi***”

- Innovative Vector Control Consortium, IVCC, (Feb 2022).

“**Research Ethics in Computing - Some Perspectives**”

- Islamic University of Science and Technology, Awantipora, India, (Feb 2022).

“**AI Applications for the Surveillance of Mosquito Vectors and Habitats**”

- AI+X Institute, University of South Florida, Tampa, USA, (Nov 2020).

“**Computer Vision Assisted Techniques for the Surveillance of Mosquito Vectors**”

- International Conference on Automation, Signal Processing, Instrumentation and Control (iCA-SIC), Vellore, India, (Feb 2020).

“Privacy Preserving Foundations and Algorithms to Detect Social Topologies of Cyber-Abuse”

- 7th International Conference on Big Data Analytics (BDA), Ahmedabad, India, (Dec 2019).

“A Novel Privacy-Preserving Socio-Technical Platform for Detecting Cyber Abuse”

- 8th International Conference on Computational Data and Social Networks (CSoNet), Ho Chi Minh City, Vietnam, (Nov 2019).

“Security, Privacy and Safety in Intelligent Transportation Systems”

- Workshop on Cybersecurity in Public Transportation, Tampa, USA, (April 2019).

“Brave New World: Privacy & Security in the Age of Machine Learning and Artificial Intelligence”

- Panelist in Cyber Florida Research Symposium, Tampa, USA, (April 2019)

“What Constitutes a Good BS in Cyber Security Program - An Academia-Industry Perspective”

- Sunshine State Teaching & Learning Conference, Daytona Beach, USA, (Jan 2019).

“Understanding and Addressing Cybersecurity from Different Angles: Computer Science, Education, and Social Science”

- Florida Cyber Conference, Tampa, USA, (Oct 2018).

“Human Centered Designs for Cyber Security”

- IEEE Intl. Conf. on Networking, Systems and Security (NSysS), Dhaka, Bangladesh, (Jan 2017).

“Wearable Sensing for Activity Recognition Towards Smarter Healthcare”

- Indian Institute of Technology (IIT), Madras, India, (Jan 2017).

“Smart and Connected Healthcare - Challenges, Wearables and Algorithms”

- Tutorial at Intl. Conf. on Collaboration Technologies and Systems (CTS), Orlando, (Oct 2016).

“Mining Digital Data for Smarter Mental HealthCare”

- The 2015 International Conference on Collaboration Technologies and Systems (CTS), Atlanta (June 2015).

“Internet Forensics for Smarter Health and Cyber Security”

- Dept. of Computer Science and Engineering, University of North Texas, Denton (May 2014).

“Combating Cyber Crimes via Human Behavior Assessment”

- Interdisciplinary Conference on Cybercrime at Michigan State University, East Lansing (March 2014).

“What Secrets can the Internet Reveal About Your Health?”

- Duke University Center for Personalized and Precision Medicine, Durham (Feb 2014).

“Fingerprinting Human Behavior in Cyber Space”

- Los Alamos National Laboratory, (Feb 2014).

“Experimental Studies on Associating Internet Usage with Mood Disorders”

- Dept. of Math., Stat. and Computer Science, Marquette University, Milwaukee (Nov 2013).

TEACHING AT USF **CIS 3363: IT Systems Security (UG)**

Topics: Introduction to Security Fundamentals in IT Systems, Network Security, Systems Security, Supply Chain Management Security

Semesters Taught: Fall 2018, 2019, 2020, 2022; Spring 2018, 2019, 2020 2021.

COT 4210: Automata Theory/ Formal Languages (UG)

Topics: Theory of Computer Science, Introduction to Complexity, Regular Languages, Context Free Languages and Turing Machines

Semester Taught: Spring 2024, Fall 2023, Spring 2017, 2023.

CIS 4930: Information Security and Privacy in Distributed Systems (UG)

Topics: Information Security, Information Privacy, Digital Forensics

Semesters Taught: Fall 2016, 2017.

CIS 6375: Information Security and Privacy in Distributed Systems (Grad)

Topics: Information Security, Information Privacy, Digital Forensics

Semesters Taught: Fall 2015, 2016, 2017; Spring 2016, 2017, 2018, 2019, 2020, 2023.

CIS 6930: Computer Systems Security (Grad)

Topics: Systems Security, Trust in Cyber Space, Cyber-Physical Systems Security

Semesters Taught: Spring 2016, 2017, 2018, 2019, 2020.

TEACHING AT
MISSOURI S&T

CS 220: Theory of Computer Science (UG)

Topics: Regular Languages, Context Free Languages and Turing Machines

Semesters Taught: Fall 2011, 2012, 2013, 2014; Spring 2015.

CS 284: Introduction to Operating Systems (UG)

Topics: OS design principles, Unix, Concurrency, Memory Management, Scheduling, Real-time OS, Network Programming and OS Security

Semesters Taught: Fall 2008, 2009, 2010, 2014; Spring 2011, 2012, 2013, 2014.

CS 468: Advanced Network Security (Grad)

Topics: Security, Privacy and Trust topics in Wireless and Wired Networks

Semesters Taught: Spring 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015.

PROFESSIONAL
SERVICES

Judge: Congressional App Challenge for High-school Students in Hillsborough County, Florida, 2024.

PC Chair: 9th International Conference on Computational Social Networks (CSoNet), Dallas, Dec 2020.

PC Chair: 13th IEEE International Conference on Wireless Algorithms, Systems and Applications (WASA), Tianjin, June 2018.

Guest Editor: IEEE Transactions on Network Science and Engineering (TNSE), Special Issue on Network Science for High-Confidence Cyber-Physical Systems 2017.

Guest Editor: Elsevier Pervasive and Mobile Computing Journal (PMC), Special Issue on Big Data for Healthcare 2016.

PhD Forum Chair: IEEE International Conference on Pervasive Computing and Communications (PerCom) 2015.

Finance Chair: IEEE International Symposium on Reliable Distributed Systems (SRDS) 2010, 2012.

Publicity Chair: IEEE International Symposium on Privacy Aware Computing (PAC) 2018.

Publicity Chair: IEEE International Symposium on Reliable Distributed Systems (SRDS) 2009, 2011.

Publicity Chair: IEEE International Conference on Mobile Data Management (MDM) 2015.

PhD Forum Chair: IEEE International Conference on Mobile Data Management (MDM) 2010.

TPC Member: ICDCS 2018, INFOCOM 2015, 2016, 2017, 2018, ICC 2015, AINA 2015, SMART-COMP 2014, MobiSPC 2014, MDM 2014, MSN 2014, MDM 2014, INFOCOM 2014, CCNC 2013, HuMoComp 2013, MDM 2013, AINA 2012, MSN 2011, MSN 2013, NBiS 2011, MASS 2011, MASS 2010, HWISE 2009.

NSF Panelist: CAREER, Smart and Connected Health, Cyber-Physical Systems, Networking

Technology and Systems, Human Centered-Computing, SBIR programs.

NIDILRR Panelist: Field Initiated Project Competition (2017, 2018 and 2019).

COMMITTEES AT
USF

Undergraduate Program Coordinator for Cybersecurity: Led the committee in architecting the BS in Cybersecurity program from scratch, getting it approved at USF, leading the effort to get the program successfully accredited by ABET (in 2022), and coordinating the overall program (2018-Present).

Advisors in Research Management: Advise the College of Engineering at USF to better support faculty research (2022 - Present).

State of Florida Discipline Committee: Member for Cybersecurity Discipline (AY 2020-2021).

Undergraduate/ ABET Committee: Member of committee to handle Undergraduate and ABET duties (2019-Present).

Course Scheduling Committee: Member of Course Scheduling Committee (2019-Present).

Faculty Search Committee: Member of Faculty and Instructor Search Committee, 2016, 2017, 2018.

Infrastructure Committee: Member of Infrastructure Committee, 2018.

Data and Decision Support Committee: Data and decision support committee member 2016, 2017 and 2018.

Tenure and Promotion Committee: Tenure and Promotion committee member in 2015, 2016, 2017, 2018, 2019.

COMMITTEES AT
MISSOURI S&T

Faculty Search Committee: Member of Best in Class (BIC) faculty hiring committee in the area of Smart Living, 2015.

Honorary Degree Committee: Assist committee in evaluating candidate's eligibility for receiving Honorary Degree from Missouri S&T - 2009, 2010, 2011.

Intellectual Property Committee: Assist committee in resolving IP issues at Missouri S&T - 2012, 2013.

Colloquium Committee: I have personally invited 70 internationally reputed speakers from Academia, Industry and Government to give seminars in the Computer Science department at Missouri S&T, and have coordinated all their visits - 2008, 2009, 2010, 2011, 2012, 2013, 2014.

Graduate Committee: Assist committee in resolving graduate studies issues in the Computer Science department at Missouri S&T - 2014.

Undergraduate Committee: Assist committee in resolving undergraduate studies issues in the Computer Science department at Missouri S&T - 2012, 2013.

Awards Committee: Assist committee in evaluating candidate's eligibility for receiving awards from Missouri S&T and UM system - 2011, 2012, 2013.

Peer Teaching Evaluations Committee: Assist committee in setting up procedures and assignments in performing peer teaching evaluations - 2011, 2012, 2013.

Faculty Search Committee: 2011, 2014.

PROFESSIONAL
MEMBERSHIP

IEEE Senior Member.

PHD STUDENTS
SUPERVISED

Ms. Hye-Seon Yi (PhD at USF)

Dissertation Title: Automated Approaches to Enable Innovative Civic Applications from Citizen Generated Imagery

Graduation Date: Aug 2023

Employment: Assistant Teaching Professor at USF.

Mr. Tanvir Bhuiyan (PhD at USF)

Dissertation Title: Insect Classification and Explainability from Image Data via Deep Learning Techniques

Graduation Date: Aug 2023

Employment: ML Software Engineer at EnerSys.

Mr. Arup Dey (PhD at USF)

Dissertation Title: Design, Deployment, and Validation of Computer Vision Techniques for Societal Scale Applications

Graduation Date: May 2021

Employment: ML Software Engineer at EnerSys.

Mr. Anthony Windmon (PhD at USF)

Dissertation Title: Detecting Symptoms of Chronic Obstructive Pulmonary Disease and Congestive Heart Failure via Cough and Breath Sounds Using Smart-Phones and Machine Learning

Graduation Date: Dec 2020

Employment: Risk Methodology Specialist and AVP at Deutsche Bank.

Ms. Mona Minakshi (PhD at USF)

Dissertation Title: Automating the Classification of Mosquito Specimens using Image Processing Techniques

Graduation Date: Aug 2020

Employment: Cloud Solutions Engineer at Intel.

Ms. Bharti Goel (PhD at USF)

Dissertation Title: Algorithms to Profile Driver Behavior from Zero-permission Embedded Sensors

Graduation Date: May 2020

Employment: Machine Learning Engineer at Kaiser Permanente.

Mr. Adel Alsheri (PhD at USF)

Dissertation Title: A Machine Learning Approach to Predicting Community Engagement on Social Media During Disasters

Graduation Date: Aug 2019

Employment: Academic Researcher, Department of Electronics and Communications Technology, King Abdulaziz City for Science and Technology.

Mr. Soheil Sarmadi (PhD at USF)

Dissertation Title: On the Feasibility of Profiling and Forecasting Internet Usage from NetFlow Logs

Graduation Date: Dec 2018

Employment: Software Engineer at Everest Labs.

Mr. Pratoool Bharti (PhD at USF)

Dissertation Title: Context Based Human Activity Recognition using Multi-modal Wearable Sensors

Graduation Date: Dec 2017

Employment: Machine Learning Engineer at Intel.

Mr. Srinivas Thandu (PhD at Missouri S&T)

Thesis Title: Algorithms Leveraging Smartphone Sensing for Analyzing Explosion Events

Graduation Date: May 2016

Employment: Software Development Engineer at Amazon.

Mr. Mark Snyder (PhD at Missouri S&T)

Dissertation Title: Foundations of Coverage in Autonomic Mobile Sensor Networks

Graduation Date: May 2014

Employment: Senior Software Design Engineer at Microsoft.

Ms. Neelanjana Dutta (PhD at Missouri S&T)

Dissertation Title: Location Based Services in Wireless Ad Hoc Networks

Graduation Date: Aug 2013

Employment: Senior Cloud Engineer at Intel.

MS STUDENTS
SUPERVISED

Ms. Jamshidbek Mirzakhlov (MS at USF)

Thesis Title: Turkic Interlingua: A Case Study of Machine Translation in Low-resource Languages

Graduation Date: July 2021

Employment: Software Engineer at Salesforce.

Ms. Venkata Sireesha Dadi (MS at USF)

Thesis Title: Drone Movement Control using Gesture Recognition from Wearable Devices

Graduation Date: Dec 2018

Employment: Software Developer at Pasco Sheriff's Office.

Mr. Kodhanda Siriyala (MS at USF)

Thesis Title: Determining Level of Cognitive Impairment via Computing Fractals using a Computer Game

Graduation Date: May 2018

Employment: Software Developer at Pasco Sheriff's Office.

Ms. Mona Minakshi (MS at USF)

Thesis Title: A Machine Learning Framework to Classify Mosquito Species from Smart-phone Images

Graduation Date: Aug 2018

Employment: Cloud Solutions Engineer at Intel (after graduating with a PhD from USF).

Mr. Surya Kamineni (MS at USF)

Thesis Title: Experimental Analysis on the Feasibility of Voice based Symmetric Key Generation for Embedded Devices

Graduation Date: May 2017

Employment: Data Science Analyst at Cross Country Home Services.

Mr. Anurag Panwar (MS at USF)

Thesis Title: Determining the Effectiveness of Soil Treatment on Plant Stress using Smart-phone Cameras

Graduation Date: Aug 2016

Employment: ML Software Engineer at Amazon.

Mr. Jake Bielefeldt (MS at Missouri S&T)

Thesis Title: Sensor Authentication in Collaborating Sensor Networks

Graduation Date: Dec 2014

Employment: R&D Engineer at Sandia Natl. Labs.

Mr. Srinivas Thandu (MS at Missouri S&T)

Thesis Title: On Temporal and Frequency Responses of Smartphone Accelerometers for Explosives Detection

Graduation Date: Dec 2014

Employment: Software Engineer at Amazon (after graduating with a PhD from Missouri S&T).

Mr. Ashok Bolla (MS at Missouri S&T)

Thesis Title: Crime Pattern Detection Using Online Social Media

Graduation Date: Dec 2014
Employment: Software Engineer at Paypal.

Ms. Doyal Mukherjee (MS at Missouri S&T)
Thesis Title: Privacy Preservation Using Spherical Chord
Graduation Date: May 2014
Employment: Software Engineer at Cerner Corp.

Ms. Sai Preethi Vishwanathan (MS at Missouri S&T)
Thesis Title: An Empirical Study on Symptoms of Heavier Internet Usage Among Young Adults
Graduation Date: Aug 2014
Employment: Software Engineer at Cerner Corp.

Mr. Muhammad Al Mutaz (MS at Missouri S&T)
Thesis Title: Sybil Detection in Vehicular Networks
Graduation Date: May 2013.

Mr. Gerry Howser (MS at Missouri S&T)
Thesis Title: Vehicle Path Verification Using Wireless Sensor Networks
Graduation Date: May 2012
Employment: Visiting Assistant Professor at Kalamazoo College, Michigan.

Mr. Raghavendra Kotikalapudi (MS at Missouri S&T)
Thesis Title: A Framework For Transparent Depression Classification In College Settings Via Mining Internet Usage Patterns
Graduation Date: Dec 2011
Employment: ML Software Engineer at Google.

REU STUDENTS
SUPERVISED

Mr. Sherzod Kariev (with Cisco), Mr. Willie McClinton (2019 Barry M. Goldwater Scholar, now at MIT), Mr. Redwan Rahman (with Twitter), Mr. Alejandro Salazar (with Cisco), Mr. Ahnaf Siddiqui (with Facebook).

REFERENCES

Dr. Bharat Bhargava
Professor - Dept. of Computer Science, Purdue University
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Phone: 765-494-6013, Email: bbshail@purdue.edu.

Dr. Nasir Ghani
Professor - Dept. of Electrical Engineering, University of South Florida
4202 E. Fowler Ave., Tampa, FL 33647, USA.
Phone: 813-974-4772, Email: nghani@usf.edu.

Dr. Dan Lin
Professor - Dept. of Computer Science, Vanderbilt University
2301 Vanderbilt Place, PMB 351826, Nashville, TN 37235, USA.
Phone: 615-322-2771, Email: dan.lin@vanderbilt.edu.

Dr. Sanjay Madria
Professor - Dept. of Computer Science, Missouri University of Science and Technology
500 W. 15th Street, 325 CS Bldg, Rolla, MO 65409, USA.
Phone: 573-341-4856, Email: madrias@mst.edu.

Dr. Balaji Padmanabhan
Professor, Dept. of Decision, Operations and Information Technologies, Robert H. Smith School of Business, University of Maryland
7621 Mowatt Ln, College Park, MD 20742, USA.

Phone: 301-405-2189, Email: bpadmana@umd.edu.