VENKATA SRIRAM SIDDHARDH NADENDLA

500 West 15th Street, 313 Computer Science Building, Rolla, Missouri, USA. https://sid-nadendla.github.io \(\display (573) 341 4090 \(\display \) nadendla@mst.edu

CURRENT APPOINTMENT

Missouri University of Science and Technology

August 2018 - Present

Assistant Professor, Computer Science

Rolla, MO

Affiliate: Intelligent Systems Center, Center for Intelligent Infrastructure, Center for Biomedical Research, Center for Additive Manufacturing Technologies

PAST APPOINTMENTS

University of Illinois at Urbana-Champaign

Urbana, IL

Postdoctoral Research Associate, Coordinated Science Laboratory

October 2016 - July 2018

Advisor: Cedric Langbort

Syracuse University

Syracuse, NY

Graduate Research Assistant, Sensor Fusion Laboratory

August 2009 - September 2016

Advisor: Pramod K. Varshney

ANDRO Computational Solutions, LLC

Rome, NY

Research Intern

Summer 2013, 2014

Supervisors: Andrew Drozd, Ashwin Amanna, Svetlana Foulke

Louisiana State University

Baton Rouge, LA

Teaching Assistant, Electrical and Computer Engineering

August 2007 - May 2009

Supervisors: Xue-Bin Liang, Mark Rabalais

EDUCATION

Syracuse University

December 2016

Ph.D. in Electrical and Computer Engineering

GPA: 3.91/4.0

<u>Thesis</u>: On the Design and Analysis of Secure Inference Networks

Advisor: Pramod K. Varshney, Distinguished Professor (EECS)

Louisiana State University

May 2009

M.S. in Electrical Engineering

GPA: 4.0/4.0

Thesis: Secure Distributed Detection in WSNs via Encryption of Sensor Decisions

Advisor: Morteza Naraghi-Pour, Michel B. Voorhies Distinguished Professor (ECE)

SCSVMV University

May 2007

B.E. in Electronics and Communication Engineering

GPA: 9.5/10

Thesis: DWRR Scheduler and CRC Checksum Verifier for 10Gbps Ethernet Packet Processor

Advisor: V. Kamakoti Veezhinathan, Professor (CSE) and Director of IIT-Madras

RESEARCH INTERESTS

My research broadly focuses on the design of trustworthy cyber-physical-human systems in diverse application-domains, with scientific advancements in the areas of:

Statistical Inference and Machine Learning

Game Theory and Mechanism Design

Trust and Reputation

Resource Allocation/Matching

Fairness in Machine Learning Human Cognition/Decision Modeling

Period: 2023-24

Period: 02/2024-09/2024

Strategic Deception and Security

Wireless Communications/Networks

RESEARCH GRANTS

AWARDED GRANTS (EXTERNAL)

PI (Solo), Boeing Proposal

Award: \$5000 Share: 100%

• Title: Cold Spray Fingerprinting and Artificial Intelligence for MAI BA 26.

• Collaborators: None

Co-PI, Optirock Group LLC

Award: \$19,993 Share: 40%

• Title: Distributed Optical Fiber Sensing for Mining Application.

• Collaborators: Taghi Sherizadeh (PI), Mohamed ElGawady (Co-PI)

SP, NSF Grant

Award: \$1,800,000

Period: 2022-26

Share: 20%

• Title: Collaborative Research: FW-HTF-R: Embedding Preferences in Adaptable Artificial Intelligence Decision Support for Transplant Healthcare to Reduce Kidney Discard.

• Collaborators: C. Canfield (PI), C. Dagli, D. Shank

SP, NSF GrantAward: \$461,288

Period: 2022-25
Share: 20%

• Title: REU Site: Research and Training Experience for Undergraduates in the areas of Cyber-security, Data Analytics and Blockchain for securing Big Data and CPS.

• Collaborators: S. Madria (PI), S. K. Das.

SP, Dept. of Transportation Grant

Award: \$1,401,100 Share: 2%

• Title: Inspecting and Preserving Infrastructure through Robotic Exploration.

• Collaborators: G. Chen (PI), J. Myers, M. El Gawady, G. Yan, H. Ma, X. Zhang, T. Luo, S. Long, B. Kania-Gosche

Co-PI, CDC-NIOSH Grant

Award: \$1,404,780

Period: 2021-25 Share: 4%

Period: 2022-26

• Title: Research, Technology and Human Interventions for Self-Escape in Underground Mine Emergencies - II. • Collaborators: S. Frimpong (PI), K. Awah-Offei, D. Bristow, S. Madria, K. Perry, C. Johnson, D. Baker, T. Sherizadeh, G. Xu

Co-PI, CDC-NIOSH Grant

Share: 5% Award: \$995,000

Period: 2020-23

Period: 2021-22

Period: 2020-21

Period: 2019-20

Period: 2024-27

Period: 2024-28

• Title: Research, Technology and Human Interventions for Self-Escape in Underground Mine Emergencies - I.

• Collaborators: S. Frimpong (PI), K. Awah-Offei, D. Bristow, S. Madria, K. Perry, C. Johnson, D. Baker, T. Sherizadeh, G. Xu

AWARDED GRANTS (INTERNAL)

Co-PI, Center for Aerospace Mfg. Tech., Missouri S&T

Award: \$40,000 Share: 20%

• Title: CAMT: A Method for Change Management in Additive Manufacturing

• Collaborators: Douglas Bristow (PI)

PI, Center for Intelligent Infrastructure, Missouri S&T

Award: \$19,300 Share: 50%

• Title: Can Multi-Modal Routes Maximize Social Welfare in Futuristic Transportation CPS?

• Collaborators: Sajal K. Das (Co-PI)

Co-PI, Center for Smart Living, Missouri S&T

Award: \$24,000 Share: 50%

- Title: Design of Effective Interventions for Drunk Driving in Semi-Autonomous Vehicles.
- Collaborators: S. N. Balakrishnan (PI)

Co-PI, Siebel grant

Period: 2017 Award: \$50,000 Share: 40%

- Title: Learning commuter preferences for traffic management in the presence of multiple (intransitive) attributes.
- Collaborators: Cedric Langbort (PI), Hari Sundaram (Co-PI)

PENDING GRANTS (EXTERNAL)

PI, Lincoln University Proposal

Share: 50% Award: \$237,678.00

- Title: Cognitive Workload Assessment for Optimizing Soldier-System Performance.
- Collaborators: K. Krishnamurthy (Co-PI)
- Full proposal to DEVCOM's BAA (PI: C. Boston, Lincoln University, Total: \$300,000)

Co-PI, CDC-NIOSH Proposal

Award: \$1,250,002.00 Share: 12%

• Title: Advancing Mining Safety: The Integration of Smart Development, Fully Automated Moni-

toring, and AI-Driven Digital Twins for Preventing Accidents and Fatalities in the United States Mining Industry.

• Collaborators: Taghi Sherizadeh (PI), Kyle A. Perry (Co-PI), Mina Esmaeelpour (Co-PI), Guang Xu (Co-PI)

PI, NSF Proposal

Award: \$15,000.00

Period: 2025-27

Share: 100%

- Title: CyberTraining: Implementation: Small: Advanced Cyberinfrastructure Training for Next-Generation Neuroscience Learning and Research.
- Full proposal to NSF (PI: S. Nair, Co-PIs: P. Rao, C. Philippi, S. L. Lim, Total: \$499,977)

PUBLICATIONS

Legend for Superscript Symbols:

My graduate students: \bigstar REU students: \clubsuit Equal contributions: *

MANUSCRIPTS UNDER REVIEW

1. S. P. Akula[⋆], M. Telukunta[⋆], and V. S. S. Nadendla, "Driver Fatigue Prediction using Randomly Activated Neural Networks for Smart Ridesharing Platforms." Submitted to *IEEE Transactions on Intelligent Transportation Systems (T-ITS)* [IF: 8.5], 2024

ACCEPTED MANUSCRIPTS (UNDER PRINT)

- 1. D. E. M. Brown[★], V. S. S. Nadendla, and S. K. Das, "TASR: A Novel Trust-Aware Stackelberg Routing Algorithm to Mitigate Traffic Congestion." Accepted to 10th IEEE International Conference on Smart Computing (SMARTCOMP'24), 2024
- 2. M. Telukunta[⋆], S. Rao[♣], G. Stickney[♣], V. S. S. Nadendla, and C. Canfield, "Learning Social Fairness Preferences from Non-Expert Stakeholder Opinions in Kidney Placement." Accepted to Conference on Health, Inference and Learning (CHIL'24), 2024
- 3. Q. Zhang★, V. S. S. Nadendla, S. N. Balakrishnan, and J. Busemeyer, "Strategic Mitigation of Agent Inattention in Drivers with Open-Quantum Cognition Models." Submitted to *IEEE Transactions on Human-Machine Systems* (Accepted with Minor Comments) [IF: 3.6], 2024

PEER-REVIEWED JOURNALS, CONFERENCES AND WORKSHOPS

Asst. Professor @ Missouri S&T (Aug 2018 - Current)

- 1. N. Lutes*, V. S. S. Nadendla, and K. Krishnamurthy, "Convolutional Spiking Neural Networks for Detecting Anticipatory Brain Potentials Using Electroencephalogram," *Scientific Reports [IF: 4.6]*, vol. 14, p. 8850, April 2024
- 2. C. Rawlins, J. Sarangapani, and V. S. S. Nadendla, "A Reputation System for Provably-Robust Decision Making in IoT Blockchain Networks," *IEEE Internet of Things Journal [IF: 10.6]*, vol. 11, no. 8, pp. 14088–14099, 2024
- 3. C. Rawlins, J. Sarangapani, and V. S. S. Nadendla, "A Reputation System for Distributed

- Intelligent Blockchain Decision-Making." in *The Fifth International Conference on Blockchain Computing and Applications (BCCA2023)*, 2023
- 4. M. Telukunta[★] and V. S. S. Nadendla, "Towards Inclusive Fairness Evaluation via Eliciting Disagreement Feedback from Non-Expert Stakeholders." in 3rd Workshop on Bias and Fairness in AI (BIAS'23) at ECML-PKDD Conference, 2023
- 5. S. Sanga*, V. S. S. Nadendla, M. Telukunta*, and S. K. Das, "Maximizing Social Welfare in Selfish Multi-Modal Routing using Strategic Information Design for Quantal Response Travelers." in *The 20th IEEE International Conference on Mobile Ad-Hoc and Smart Systems* (MASS 2023), 2023
- 6. P. Calyam, M. Kejriwal, P. Rao, J. Cheng, W. Wang, L. Bai, V. S. S. Nadendla, S. Madria, S. K. Das, R. Chadha, K. A. Hoque, K. Palaniappan, K. Neupane, R. L. Neupane, S. Gandhari, M. Singhal, L. Othmane, M. Yu, V. Anand, B. Bhargava, B. Robertson, K. Kee, P. Buzzanell, N. Bolton, and H. Taneja, "Towards a Domain-Agnostic Knowledge Graph-as-a-Service Infrastructure for Active Cyber Defense with Intelligent Agents," in 52nd IEEE Applied Imagery Pattern Recognition Workshop (AIPR'23), pp. 1–8, 2023
- 7. A. Alsafasfeh, L. Alagha, A. Alzidaneen, and V. S. S. Nadendla, "Optimization of Flotation Efficiency of Phosphate Minerals in Mine Tailings using Polymeric Depressants: Experiments and Machine Learning," *Physicochemical Problems of Mineral Processing [IF: 1.61]*, vol. 58, no. 4, 2022
- 8. A. Lang, J. Castle, D. A. Bristow, R. G. Landers, and V. S. S. Nadendla, "Logistic Regression Classification to Predict Regional Anomalies in Nominally Printed Volume of Separate Test Pieces," in *Proceedings of the 33rd Annual International Solid Freeform Fabrication Symposium An Additive Manufacturing Conference (SFF'22)*, 2022
- 9. R. Assaad, M. O. Ahmed, I. H. El-Adaway, A. Elsayegh, and V. S. S. Nadendla, "Comparing the Impact of Learning in Bidding Decision-Making Processes Using Algorithmic Game Theory," *Journal of Management in Engineering [IF: 7.4]*, vol. 37, p. 04020099, Jan 2021
- S. Roy, P. Roy, V. S. S. Nadendla, and S. K. Das, "Influence Spread Control in Complex Networks via Removal of Feed Forward Loops," in *International Conference on Computer Communications and Networks (ICCCN)*, pp. 1–9, IEEE, 2021
- 11. S. Sanga[★] and V. S. S. Nadendla, "On the Design of Strategic Task Recommendations for Sustainable Crowdsourcing-Based Content Moderation." in AAMAS Workshop on Autonomous Agents for Social Good (AASG'21) [Acceptance Rate = 25%], 2021
- 12. V. S. S. Nadendla and L. R. Varshney, "A Predicament in Securing Blockchain Consensus via Controlling Cryptopuzzle Difficulty," in *Third International Conference on Blockchain and Cryptocurrency (ICBC'21) [Acceptance Rate = 18%]*, 2021
- 13. A. U. Rehman, T. Lyche, K. Awuah-Offei, and V. S. S. Nadendla, "Effect of Text Message Alerts on Miners' Evacuation Decisions," Safety Science [IF: 6.1], vol. 130, Oct 2020
- 14. A. Pratap, R. Gupta, V. S. S. Nadendla, and S. K. Das, "Bandwidth-Constrained Task Throughput Maximization in IoT-enabled 5G Networks," *Pervasive and Mobile Computing* [IF: 4.3], vol. 69, p. 101281, Nov 2020
- 15. M. Telukunta[★] and V. S. S. Nadendla, "On the Identification of Fair Auditors to Evaluate

- Recommender Systems based on a Novel Non-Comparative Fairness Notion," in *in Third FAc*cTRec Workshop on Responsible Recommendation (FAccTRec'20), September 2020. Available: https://arxiv.org/pdf/2009.04383.pdf
- 16. M. Devaguptapu[⋆] and V. S. S. Nadendla, "On Task Decision Processes based on Discounted Satisficing Heuristic Employed by Crowd Workers," in *Proc. of 7th AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, October 2019. Work-in-Progress Paper
- 17. A. Pratap, F. Concone, V. S. S. Nadendla, and S. K. Das, "Three-Dimensional Matching Based Resource Provisioning for the Design of Low-Latency Heterogeneous IoT Networks," in *Proc. of the 22nd Intl. ACM Conf. on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, MSWIM '19, p. 79–86, 2019
- 18. A. Pratap, R. Gupta, V. S. S. Nadendla, and S. K. Das, "On Maximizing Task Throughput in IoT-Enabled 5G Networks Under Latency and Bandwidth Constraints," in *Proc. of the IEEE Intl. Conf. on Smart Computing*, SMARTCOMP '19, pp. 217–224, June 2019

Postdoc @ Univ. Illinois, Urbana-Champaign (Dec 2016 - Jul 2018)

- 1. V. S. S. Nadendla, C. Langbort, and T. Başar, "Effects of Subjective Biases on Strategic Information Transmission," *IEEE Trans. on Comm.*, vol. 66, pp. 6040–6049, Dec 2018
- 2. V. S. S. Nadendla and C. Langbort, "On Estimating Multi-Attribute Choice Preferences using Private Signals and Matrix Factorization," in *Proc. of the 52nd Annual Conf. on Information Sciences and Systems (CISS)*, pp. 1–6, March 2018
- 3. V. S. Nadendla, E. Akyol, C. Langbort, and T. Başar, "Strategic Communication between Prospect Theoretic Agents over a Gaussian Test Channel," in *Proc. of the 2017 IEEE Military Communications Conference (MILCOM)*, pp. 109–114, Oct 2017

Grad. Student @ Syracuse Univ. and Louisiana State Univ. (Before Dec 2016)

- 1. V. S. S. Nadendla, C. Langbort, and T. Başar, "Effects of Subjective Biases on Strategic Information Transmission," *IEEE Trans. on Comm.*, vol. 66, pp. 6040–6049, Dec 2018
- 2. V. S. S. Nadendla, V. Sharma, and P. K. Varshney, "On Strategic Multi-Antenna Jamming in Centralized Detection Networks," *IEEE Signal Processing Letters*, vol. 24, pp. 186–190, Feb 2017
- 3. V. S. S. Nadendla, S. K. Brahma, and P. K. Varshney, "Optimal Spectrum Auction Design With 2-D Truthful Revelations Under Uncertain Spectrum Availability," *IEEE/ACM Trans. on Networking*, vol. 25, pp. 420–433, Feb 2017
- 4. **V. S. S. Nadendla** and P. K. Varshney, "Design of Binary Quantizers for Distributed Detection Under Secrecy Constraints," *IEEE Trans. on Signal Proc.*, vol. 64, pp. 2636–2648, May 2016
- 5. V. S. Nadendla, S. Brahma, and P. K. Varshney, "Towards the Design of Prospect-Theory based Human Decision Rules for Hypothesis Testing," in *Proc. of the 54th Annual Allerton Conf. on Communication, Control, and Computing (Allerton)*, pp. 766–773, Sep. 2016

- 6. B. Kailkhura, V. S. S. Nadendla, and P. K. Varshney, "Distributed Inference in the Presence of Eavesdroppers: A Survey," *IEEE Comm. Magazine*, vol. 53, pp. 40–46, June 2015
- 7. V. S. S. Nadendla, S. Liu, and P. K. Varshney, "Design of Transmit-Diversity Schemes in Detection Networks under Secrecy Constraints," in *Proc. of the 53rd Annual Allerton Conf. on Communication, Control, and Computing (Allerton)*, pp. 794–801, Sep. 2015
- 8. V. S. Nadendla, Y. S. Han, and P. K. Varshney, "Information-Dispersal Games for Security in Cognitive-Radio Networks," in *Proc. of the 2015 IEEE Intl. Symp. on Information Theory (ISIT)*, pp. 1600–1604, June 2015
- 9. V. S. Nadendla, Y. S. Han, and P. K. Varshney, "Distributed Inference With M-Ary Quantized Data in the Presence of Byzantine Attacks," *IEEE Trans. on Signal Processing*, vol. 62, pp. 2681–2695, May 2014
- 10. R. El-Bardan, V. S. S. Nadendla, S. Brahma, and P. K. Varshney, "On ARQ-based Wireless Communication Systems in the Presence of a Strategic Jammer," in *Proc. of the 2014 IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, pp. 273–277, Dec 2014
- 11. V. S. S. Nadendla, S. Brahma, and P. K. Varshney, "A Bilateral-Market based Mechanism for Spectrum Allocation in Cognitive Radio Networks," in *Proc. of the 5th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAM-SAP)*, pp. 444–447, Dec 2013
- 12. A. Vempaty, V. S. S. Nadendla, and P. K. Varshney, "Further Results on Noise-Enhanced Distributed Inference in the Presence of Byzantines," in *Proc. of the 16th International Symposium on Wireless Personal Multimedia Communications (WPMC)*, pp. 1–5, June 2013
- 13. V. S. Nadendla, S. Brahma, and P. K. Varshney, "An Auction-Based Mechanism for Dynamic Spectrum Allocation in Participatory Cognitive Radio Networks," in *Proc. of the 50th Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, pp. 2120–2126, Oct 2012
- 14. V. S. S. Nadendla, H. Chen, and P. K. Varshney, "Minimax Games for Cooperative Spectrum Sensing in a Centralized Cognitive Radio Network in the Presence of Interferers," in *Proc. of the 2011 Military Communications Conference*, pp. 1256–1260, Nov 2011
- 15. M. Gagrani, P. Sharma, S. Iyengar, V. S. S. Nadendla, A. Vempaty, H. Chen, and P. K. Varshney, "On Noise-Enhanced Distributed Inference in the Presence of Byzantines," in *Proc. of the 49th Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, pp. 1222–1229, Sep. 2011
- 16. M. Naraghi-Pour and V. S. S. Nadendla, "Secure Detection in Wireless Sensor Networks using a Simple Encryption Method," in *Proc. of the 2011 IEEE Wireless Communications and Networking Conference*, pp. 114–119, March 2011
- 17. V. S. Nadendla, H. Chen, and P. K. Varshney, "On Jamming Models against Collaborative Spectrum Sensing in a Simple Cognitive Radio Network," in 2010 Conference Record of the Forty Fourth Asilomar Conference on Signals, Systems and Computers, pp. 961–965, Nov 2010
- 18. V. S. S. Nadendla, H. Chen, and P. K. Varshney, "Secure Distributed Detection in the Presence of Eavesdroppers," in 2010 Conference Record of the Forty Fourth Asilomar Conference

TECHNICAL REPORTS

R1. O. Ozdemir, A. L. Drozd, I. Kasperovich, A. Croneiser, P. K. Varshney, W. Du, H. Chen, and V. S. S. Nadendla, "Cyber Superiority for Air Force Combatant Commanders: Integrated Air/Space/C2/Cyber Dynamic Spectrum Exploitation for Enhanced Cyber Domain Maneuverability and Security," Department of Defense Electromagnetic Environmental Effects (DoD E3) Program Review, Tampa, FL, Apr. 2010.

TALKS

WORKSHOPS (Abstracts Published, Not Peer-Reviewed)

- W1. On the Effects of Subjective Biases on Strategic Information Transmission between Human Agents, *Midwest Workshop on Control and Game Theory*, Lansing, MI, April 28, 2018.
- W2. Strategic Communication between Prospect Theoretic Agents over a Gaussian Test Channel, Midwest Workshop on Control and Game Theory, Ann Arbor, MI, April 21, 2017.
- W3. Optimal Spectrum Auction Design with Two-Dimensional Truthful Revelations under Uncertain Spectrum Availability, *Nunan Day Workshop*, Syracuse, April 5, 2016. (Best poster award in EECS dept.)
- W4. Secure Distributed Inference in the Presence of Eavesdroppers, *Nunan Day Workshop*, Syracuse, April 6, 2015. (Best poster award in EECS dept.)
- W5. Auction-based mechanism for joint spectrum sensing and allocation in cognitive radio networks, *Nunan Day Workshop*, Syracuse, April 6, 2013.
- W6. Distributed Detection in the Presence of Eavesdroppers, DIMACS Workshop on Information Theoretic Network Security, Rutgers University, Piscataway, NJ, November 14, 2012.
- W7. Effect of Jamming on Distributed Spectrum Sensing in a Cognitive Radio Network, *Nunan Day Workshop*, Syracuse, April 13, 2012.
- W8. Cyber Superiority for Air-force Combatant Commanders: Integrated Air/Space/C2/Cyber Dynamic Spectrum Exploitation for Enhanced Cyber Domain Maneuverability and Security, Complex Networks Workshop, Arlington, VA, December 2, 2011.

INVITED TALKS AND SEMINARS

- T1. EEG-based Spiking Neural Networks for Braking Intent Detection on Neuromorphic Hardware, Computer Science Department Seminar, Univ. of Missouri Columbia, Feb. 21, 2024.
- T2. Towards a Secure and Trustworthy Ecosystem of Connected and Autonomous Vehicles, STL-CyberCon, Univ. of Missouri at Saint Louis, Nov. 2022.
- T3. Fair, Perceptual Learning for Trustworthy Socio-Technical Systems, Dept. of Computer Science, Missouri Univ. of Science and Technology, 2020.
- T4. Distributed Inference with M-ary Quantized Data in the Presence of Byzantine Attacks, Army

Research Laboratory, Adelphi, MD, June 20, 2017.

T5. Distributed Inference with M-ary Quantized Data in the Presence of Byzantine Attacks, BLISS Laboratory, Arizona State Univ., June 3, 2015.

TEACHING

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

(Role: Instructor/Guest Lecturer)

- CS 5408 (UG/G) Game Theory for Computing: Fall 2021/2022/2023/2024
- CS 6406 (G) Machine Learning for Computer Vision: Spring 2022/2023/2024
- CS 2500 (UG) Algorithms: Fall 2018, Spring 2022/2023/2024
- CS 6001 (G) Algorithmic Game Theory: Spring 2020/2021
- CS 5001 (UG/G) Game Theory for Computing: Fall 2019/2020
- CS 6204 (G) Applied Graph Theory (Guest Lect.: Matching and Factors): Spring 2019

UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN

(Role: Guest Lecturer)

• AE 504 (G) - Optimal Aerospace Systems (Guest Lect.: Model Predictive Control), Fall 2017

SYRACUSE UNIVERSITY

(Role: Guest Lecturer)

• ECS 691 (G) - Fundamentals of Research (Guest Lect.: Technical Illustration), Fall 2013

LOUISIANA STATE UNIVERSITY

(Role: Teaching Assistant/Lab Instructor)

- Digital Design Lab using Verilog HDL (UG Lab Instructor), Spring 2009
- Probability Theory & Random Processes (G Teaching Assistant), Fall 2008
- Signals & Systems (UG Teaching Assistant), Spring 2008, Fall 2008
- Electric & Magnetic Fields (UG -Teaching Assistant), Fall 2007, Spring 2008

CURRENT STUDENTS

Ph.D. STUDENTS

- Mukund Telukunta (My Role: Primary Advisor)
- Nathan Lutes (My Role: Co-Advisor, Primary Advisor: K. Krishnamurthy MAE dept.)
- Luke Holliday (My Role: Co-Advisor, Primary Advisor: Sanjay Madria)
- Doris E. M. Brown (My Role: Co-Advisor, Primary Advisor: Sajal K. Das)

B.S. STUDENTS

• Dheeraj Mallikarjun

PAST STUDENTS

Ph.D. STUDENTS

• Qizi Zhang (Co-Advisor and Acting Chair; Primary Advisor: Late S. N. Balakrishnan), Quantum-Inspired Concepts in Decision Making, Missouri S&T, Spring 2021.

M.S. STUDENTS

- Sree Pooja Akula, Dynamic Discounted Satisficing based Driver Decision Prediction in Sequential Taxi Requests, Missouri S&T, Spring 2023
- Nikola Andric, MAT: Genetic Algorithms based Multi-Objective Adversarial Attack on Multi-Task Deep Neural Networks, Missouri S&T, Spring 2023
- Sainath Sanga, Maximizing Social Welfare in Selfish Multi-Modal Routing using Strategic Information Design for Quantal Response Travelers, Missouri S&T, Summer 2022.
- Mounica Devaguptapu, On Predicting Stopping Time of Human Sequential Decision Making using Discounted Satisficing Heuristic, Missouri S&T, Summer 2020.

B.S. STUDENTS

- Gabriella Stickney (NSF REU Intern from Michigan State University)
- Sukruth Rao (NSF REU Intern from Michigan State University)
- Conrad Newry (SERA Intern @ Missouri S&T), Benedict College (HBCU), SC, Summer 2022.
- Nikola Andric, Missouri S&T, Summer 2021.
- Andrew Sunarto, Missouri S&T, Spring 2021.
- Mukul Gagrani (co-advised), Syracuse University, Summer 2011
- Pranay Sharma (co-advised), Syracuse University, Summer 2011

THESIS COMMITTEE MEMBERSHIP (AS A NON-ADVISOR)

Total Graduate Students: 47

- Ph.D. Students: 36 (includes 12 out-of-dept students)
- M.S. Students: 11

PROFESSIONAL SERVICE

NSF Panels and Workshops

• Reviewer (Multiple Panels), National Science Foundation, 2022-24

- NSF CISE Career Workshop 2024, Washington, DC, USA, April 29-30, 2024.
- NSF CPS Aspiring PI Workshop 2024, Nashville, TN, USA, March 19-21, 2024.
- NSF CISE Career Workshop 2019, Alexandria, VA, USA, April 8-9, 2019.
- NSF's S&CC Aspiring PI Workshop (Travel Grant Recipient), Kansas City, MO, USA, September 17, 2018.

Publication Co-Chair

• WoWMoM 2022, Belfast, United Kingdom.

Technical Program Committee Member

• SMARTCOMP 2021, Virtual Conference.

Session Chair & Organizer

• Invited Session on "Human-System Interaction", CISS 2018, Princeton, NY.

Reviewer

- Journals: IEEE Trans. Signal Processing, IEEE Signal Processing Letters, IEEE Trans. Wireless Communications, IEEE Communication Letters, IEEE Wireless Communication Letters, IEEE J. Special Areas in Communication (Sp. Issue: Human-in-the-Loop Mobile Networks), IEEE Trans. Signal & Information Processing over Networks, IET Communication, IET Networks, IET J. Engineering, International J. Ad Hoc & Ubiquitous Computing, Sensors, Pervasive and Mobile Computing, Peer-to-Peer Networking and Applications, IEEE Control Systems Letters, IEEE Trans. on Dependable and Secure Computing, IEEE Trans. on Network and Service Management.
- Conferences: ISIT-2012, ICC-2014, ICC-2015, ICC-2018, INFOCOM-2019, AISTATS 2022, WoWMoM 2022.

Computer Science Department, Missouri S&T

- Undergraduate Program Committee, 2023-Current
- Graduate Program Committee, 2021-23
- Faculty Ambassador Committee, 2021-23
- Department Chair Search Committee, 2021-23
- Tenure-Track Faculty Search Committee, 2019-20, 2022-23, 2023-24.
- Professional Graduate Studies Committee, 2022
- Academic Advisor Search, Spring 2022
- Staff Search Committee, 2021
- Research Assistant Professor Search Committee, Summer 2020.
- Represented CS dept on Discovery Day: Oct 2019 and Apr 2020.

• Representing CS dept on Open House Day: Apr 2021.

College/University, Missouri S&T

- Information Technology and Computing Committee, 2023 Current
- Computer Science Judge, Project Lead The Way (PLTW) Competition for high-school students.
- CEC Emerging Research Committee, Fall 2020-23
- Advisor, Game Development Club (Student Organization), 2021 Current
- Advisor, India Association (Student Organization), 2023 Current
- Judge, Local Hack Day, SIGHACK 2019
- Judge, Intelligent Systems Center Graduate Research Symposium, 2019, 2022.
- Judge, Intelligent Systems Center Poster Competition, 2018, 2021, 2023.

AWARDS & ACHIEVEMENTS

Missouri S&T

- Best Paper Candidate (Among top-3 papers), SMARTCOMP 2019.
- Travel Grant, NSF S&CC Aspiring PI Workshop, ISC2 2018.

Syracuse University

• Best EECS Poster Award, Nunan Poster Competitions 2015 & 2016

SCSVMV University

- University Gold Medal for securing the highest rank in BE (ECE) degree examinations in the period 2003-2007.
- Dr. S. Subbulakshmi Endowment Cash Prize for securing the highest score in the university examinations, SCSVMV University, India in the period 2003-2007.
- Dr. S. Suryanarayanan Endowment Cash Prize for securing the highest score in Chemistry in the university examinations, SCSVMV University, India in the year 2003-2004.

EXTRACURRICULAR ACTIVITES

Co-Founder/Vice-President/Treasurer

SPICMACAY@SU, Graduate Student Organization

Aug 2013 - Dec 2015 Syracuse University

- Organizational Structure, Concert Planning/Management, Annual Budgets & Proposals, Networking.
- Collaboratively raised about \$20,000 and co-organized 5 concerts of Indian Classical Music and Dance in Syracuse University.