Azizul Zahid

Knoxville, TN, USA | (+1) 8652327003
Email: azahid@vols.utk.edu
LinkedIn | GitHub | Website | Google Scholar

RSEARCH INTERESTS

Reinforcement Learning, Deep Learning, Machine learning, On-device Sensors

ACADEMIC CREDENTIALS

University of Tennessee, Knoxville **June'23 - Present**
PhD (ongoing) in Computer Engineering (3.95/4.00) *Knoxville, TN, USA*

Bangladesh University of Engineering and Technology **Feb'17 - May'22**
B.Sc. in Electrical and Electronic Engineering (3.63/4.00) *Dhaka, Bangladesh*

RESEARCH EXPERIENCES

Graduate Research Assistant, EPIC LAB **June'23 - Present**
Supervisor: Dr. Sai Swaminathan
Electrical Engineering and Computer Science (EECS), University of Tennessee, Knoxville

WORK EXPERIENCES

Graduate Teaching Assistant Fall'23, Spring'24, Fall'24, Spring'25
Courses: Computer Organizations (COSC 230), Circuits I (ECE 201), Computer System Organization (ECE 356)
Electrical Engineering and Computer Science (EECS), University of Tennessee, Knoxville

PUBLICATIONS

Conferences

C1: "*PulseRide: A Robotic Wheelchair for Personalized Exertion Control with Human-in-the-Loop Reinforcement Learning"*, **Azizul Zahid**, Bibek Poudel, Danny Scott, Jason Scott, Scott Crouter, Weizi Li, Sai Swaminathan, submitted to IEEE/ACM CHASE 2025.

Journals

J1: "*RadioGami: Battery-free, Micropower, Long-Range, Interactive Frequency Selective Surfaces*", Imran Fahad, Danny Scott, **Azizul Zahid**, Matthew Bringle, Srinayana Patil, Ella Bevins, Carmen Palileo, Sai Swaminathan, submitted to "*Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) – 2025*".

J2: "*NeuroCamTags: Long-Range, Battery-free, Wireless Sensing with Neuromorphic Cameras*", Danny Scott, Matthew Bringle, Imran Fahad, Gaddiel Morales, **Azizul Zahid**, Sai Swaminathan, accepted in "*Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) – 2024*".

J3: Mir Sayeed Muhammad, **Azizul Zahid**, Md. Asif Iqbal, "*BanglaNum - A Public Dataset for Bengali Digit Recognition from Speech*", arXiv preprint arXiv: 2403.13465, 2024

RELEVENT COURSEWORKS

Graduate level: Reinforcement Learning (ECE 517), Embedded Systems (ECE 555), Bio Inspired Computation (COSC 527), Deep Learning (COSC 525), Natural Language Processing, Human Computer Interaction, Computer Vision (ECE 574), Robot opt., est. & cont. (ECE 599)
Undergraduate level: Probability and Statistics, Linear Algebra, Calculus, Microprocessors and Embedded System, Digital Electronics, Solid State Devices, Communication I & II, Computer Programming theory & Lab, Digital Signal Processing, Control Systems

TECHNICAL SKILLS

Programming Languages: Python, MATLAB, C/C++
Data mining: NumPy, Pandas
Data visualization: Matplotlib, Seaborn
Machine learning: Scikit-Learn
Deep learning: PyTorch
Others: Git, GitHub, Latex, MS office

PROJECTS

- "*FlowSync: Synergizing Heartbeat and Algorithms for Dynamic Fluid Control Enhancement.*" – Course project for ECE 517 (Fall'23)
- "*IoT-based Temperature Control System in Poultry Farm.*" – Course project for ECE 555 (Fall'23)

- "*Adaptive Neural Piloting: Exploring Neural Network Applications in Aviation Simulation.*" – Course project for COSC 525 (Spring'24)
- "*Gesture Recognition using Spiking Neural Network.*" – Course project for COSC 527 (Spring'24)

REFERENCES

Dr. Sai Swaminathan
Assistant Professor
EECS, UTK
Email: sai@utk.edu