Seoyoung (Amy) An

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Python, C++, C, Java, C# | Pandas, Dash, Pytorch, TensorFlow | Jupyter Notebook, VS Code, Git, Docker

EDUCATION

Ph.D. in Computer Science — University of Tennessee, Knoxville
Advisor: Catherine D. Schuman — *August 2024 – TBD*

Bachelor of Computer Science — University of Tennessee, Knoxville
Minor in Machine Learning and Cybersecurity — *August 2020 – May 2024*
Chancellor's Honors Program — *GPA: 3.98/4.0*

AFFILIATIONS

Systers: Women in EECS — August 2021 – Present
Vice President (May 2023-May 2024), Treasurer (August 2022- May 2023, June 2024-Current)

- Serve a volunteer organization dedicated to women in EECS at the University of Tennessee, Knoxville as an officer through hosting events (AI Panel, Mini Internship and Research Fair, and more) and managing finance and organizing website to recruit, retain, and mentor female and non-binary EECS students.

RESEARCH PROJECTS

QMEENC in TENNLab — June 2024 – Present

- Implement Spiking Neural Network model by plugging in the raw experimental data of quantum material and evaluate the impact of different decisions at the low-level on application performance.

Analytics for Neural Networks (A4NN) Research in GCLab — August 2022 – May 2024

- Create a visual interactive analytics dashboard tool in Python that visualizes the network structures, identifies the common subsequences, and calculates the distance between networks for analysis as an undergraduate research assistant.
- Analyze neural network structures and validation accuracy generated by the Neural Architecture Search prediction engine using protein diffraction dataset.

PUBLICATIONS

S. An, G. Channing, C. Schuman, and M. Taufer, "VINARCH: A Visual Analytics Interactive Tool for Neural Network Archaeology," *2023 IEEE International Conference on Cluster Computing Workshops (CLUSTER Workshops)*, Santa Fe, NM, USA, 2023, pp. 50-51.

PROJECTS

Spiking Neural Network Drone — October 2023 – May 2024

- Train, simulate, and test Crazyflie drone for autonomous flight using Spiking Neural Networks.

Wordle Solver — November 2023 – December 2023

- Create an interactive Wordle Solver with an average attempt of 3.87 using the Bayesian model.

RECOGNITIONS

Research Award of Merit — May 2024

- Award issued by Exhibition of Undergraduate Research and Creative Achievement (EURēCA)

IEEE CLUSTER Student Travel Awards — October 2023

- Award for students for travel assistance for the IEEE CLUSTER conference.