Sizhe Zhang

szhang6@villanova.edu | https://vu-sizhe-zhang.github.io/

EDUCATION

Villanova University

Ph.d Student in Computer Engineering

• Advised by Prof. Xun Jiao

Cornell University

Master of Engineering in Electrical Computer Engineering

University at Buffalo SUNY

Bachelor of Science in Electrical Engineering

• Degree Honors: Magna Cum Laude

• Dean's List: Spring 2015, Spring 2018, Fall 2018

Publication

• Sizhe Zhang, Ruixuan Wang, Dongning Ma, Jeff Jun Zhang, Xunzhao Yin, Xun Jiao, "Energy-Efficient Brain-Inspired Hyperdimensional Computing Using Voltage Scaling". 2022 Design, Automation and Test in Europe Conference (DATE), Antwerp, Belgium, 2022

- Sizhe Zhang, Ruixuan Wang, Jeff (Jun) Zhang, Abbas Rahimi, Xun Jiao, "Assessing Robustness of Hyperdimensional Computing Against Errors in Associative Memory". The 32nd IEEE International Conference on Application-specific Systems, Architectures and Processors (ASAP), Virtual, 2021.
- Depeng Wang, Huijuan Zhang, Tri Vu, Ye Zhan, Akash Malhotra, Pei Wang, Upendra Chitgupi, Aliza Rai, **Sizhe Zhang**, Lidai Wang, Jan D Huizinga, Jonathan F Lovell, Jun Xia. "Trans-illumination intestine projection imaging of intestinal motility in mice". **Nature Communications**, 2021.

RESEARCH EXPERIMENT

Graduate Research 2021-Present

• Research Assistant - Villanova University Dependable, Efficient, and Intelligent Computing Lab (DETAIL)

Undergraduate Research

2017-2018

Villanova, PA

2021-Present

Ithaca, NY 2019-2020

Buffalo, NY

2014-2019

• Research Assistant - University at Buffalo Optical & Ultrasonic Imaging Laboratory

Teaching

Student Assistant | University at Buffalo

2018

- EE202 Circuit Analysis
- EE305 Applied Probability
- Study lounge

Honors

• DAC 2021 Young Fellow Program