Jinzhi Shen

217-480 4187| jinzhis9@bu.edu
224 Kelton st #1 Allston, Boston, MA, 02134
www.linkedin.com/in/jinzhishen

Education

Master of Science in Electrical and Computer Engineering — **Boston University**
GPA: 3.57/4.0 — Sep 2023 - Dec 2024

Bachelor of Science in Computer Engineering — **University of Illinois at Urbana-Champaign**
GPA:3.45/4.0 — Graduated: Dec 2022

Relevant course & skill: FPGA development, Machine learning, embedded system design, laboratory instrument operation, signal processing, PCB design

Research Experience

Dahmen's Cracking Team — Undergraduate Research Assistant
University of Illinois — May 2019 - Jan 2020

- Analyzed data with python on avalanches resulting from shear of a glass-hydrogel interface by using the Complementary Cumulative Distribution Function (CCDF) to explore and substantiate parallels in internal and external friction characteristics of hydrogel.
- Applied Python for comprehensive data analysis and implemented mean field theory to model frictional behaviors.

UAV Project — Undergraduate Research Assistant
University of Illinois — Sep 2020 - Sep 2021

- Investigated the capabilities and application of the "faster" algorithm as a 3D trajectory planner for Unmanned
- Aerial Vehicles on Unreal Engine.
- Validated the feasibility of the algorithm under the effect of Gaussian noise, white noise, and uniform noise.

3D Scan System for Biomedical Lab — Research Assistant of Yang's Group
Boston University — Sep 2023-Present

- Solely made and assembled the 3D scanning system of photoacoustic waves applied in bio-medical lab with 3D-printed modules and step-motors.
- Designed a system to scan 3-sample points per second at 10 μm level, ensuring precise tracking and analysis for current research in Yang's lab.
- Synchronized data collection and laser control to ensure precise measurements
- Currently applying Bluetooth to reduce scan time 40% and designing the algorithm to reduce signal noise. Aiming to write a paper on improvements in the following months.

Work Experience

AxisMED
Web Developer — Jan 2022-Jan 2023

- Designed and built a multi-page website for clients of AxisMED in a group of two people. The website serves the functionality of accepting clients' emails and presenting information of AxisMED.

Electronics Design Facility
Student Hardware Technician — Feb 2024 - Aug 2024

- Tested AC/DC power supplies. Troubleshooted Enclustra Mercury PE1 board with Zynq UltraScale+ MPSoc.
- Currently fixing the start-up problem of TDS 5104 Oscilloscope.

Skill Summary

- Language: C++, Python, Pytorch, Java Script, HTML,CSS, R, VHDL, Verilog, Assembly
- Tools: Arduino IDE, AutoDesk, Vivado, Arduino IDE, STM32Cube IDE, Keil, ModelSim, MATLAB, Visual Studio Code, Spider, Allegro
- Platform: Linux (Ubuntu, Debian), Windows

Publications

H. Chen, K. Ma, J. Shen "Interpretable Machine Learning Facilitates Disease Prognosis: Applications on COVID-19 and Onward," Warwick Evans Publishing. Available: https://wepub.org/index.php/IJCSIT/article/view/3228

Awards and honors

Math Contest Modeling Mar 2020

Honorable Mention

·Three days working with two other people

·Set up math models on future population distribution of fish