YU CYAN ZHANG

EDUCATION

Johns Hopkins University   **Expected May 2027**

B.S. Computer Science, Physics

Honors & Awards: Dean's List

Relevant Coursework: Data Structures, Computer Systems Fundamentals, Calc. III, Honors Linear Algebra, Diff. Eq., Classical Mechanics II, Statistical Physics/Thermodynamics

PERSONAL PROJECTS

Ultra-wideband(UWB) Real Time Location Tracking System   *January 2024 - August 2024*

- Developed library for Qorvo UWB transceiver modules that allowed compatibility with ESP32 and Arduino microcontrollers via SPI in C++
- Implemented algorithm that calculates distance between UWB modules based on UWB radio signal time-of-flight with signal reception/transmission timestamps
- Live-plotted calculated distances between UWB modules with Python using Matplotlib and PySerial

Cache Simulator   *March 2024*

- C++ implementation of trace-based cache simulator, supporting write-allocate/no-write-allocate and write-through/write-back cache write policies, LRU/FIFO evictions
- Benchmarked performance for variety of cache configurations, determining best overall configuration

EXTRACURRICULAR AND LEADERSHIP EXPERIENCE

Johns Hopkins Varsity Football

Cornerback/Defensive Back   *August, 2023 – Present*

- Managed a 30+ hour per week schedule in a team-oriented and highly collaborative environment as a Top-10 Division III program

SKILLS, ACTIVITIES & INTERESTS

Languages: Python(Pandas, Numpy, Matplotlib, Scipy, PyTorch, Scikit-learn), C/C++, Java(JMH, JUnit)

Technologies: Linux/UNIX, Git/GitHub, Jupyter Notebook, Docker, Arduino, Vim/Nvim, Excel, Monte Carlo Simulation

Activities & Interests: Blackjack, Poker, Basketball