Qinzhou(Nick) Song

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Education

B.S. in Computer Engineering / M.S. in Computer Science, 08/2022 – 05/2025
Washington University in St. Louis
- GPA: 3.74/4.0
- Relevant Courses:
  -Multi-Paradigm in C++, Software Engineering, Object-Oriented Laboratory, Malware Analysis, Machine Learning and Pattern Classification, Systems Software
  -Computer Architecture, Electronic Circuits, Digital Logic and Computer Design

B.S. in Computer Science, *Sewanee: The University of the South* 08/2019 – 05/2022
- Degree Conferral Expected May 2025
- GPA: 3.46/4.0
- Dean's List, Order of Gown
- Relevant Courses:
  -Data Structures and Algorithms, Data Mining, Analysis of Algorithms, Functional and Concurrent Programming

Professional Experience

Student Worker, 08/2019 – present | St. Louis
Washington University of St. Louis Supplier Diversity
- Consulted with over 50 Supplliers through calls, emails, events
- Designed 5 reports for university diverse/overall spend using Power BI over large dataset(billions of dollars)
- Analyzed data for KPI and quarter reports in Excel for over 1 year

Student Researcher, *Washington University of St. Louis* 05/2022 – 08/2022 | St. Louis
- Gamma-ray telescope demonstrator project
- Designed noise cancellation algorithm in simulation using single and double threshold methods to improve the localization accuracy by 20%
- Analyzed energy levels of Gamma-ray events using Vitis HLS using integration and prefixed sum methods that reduced latency below 300 cycles
- Simulated data flow from front end ASICs to FPGA using FIFOs, PynqMicroblaze, PL control

Skills

Programming Language
C++, Java, Python, C, JavaScript, PHP, MySQL

ML/Data Science
Sci-kit Learn, TensorFlow, Matlab, R, NumPy

Hardware/Computer Architecture
Vivado, VHDL, Verilog, Vitis HLS

Other
Excel, Elixir, Linux, Swift, Power BI

Projects

Article Recommender, *Ongoing project, Python, Tensorflow* 09/2023 – present
- Designing an article recommender algorithm for Invisibly
- Implementing DKN(Deep Knowledge-Aware Network) using TensorFlow
- Building simple KNN algorithm by assigning scores to articles' category, title, and description

Dynamic Memory Allocator, *C, Linux*
- Designed a general-purpose dynamic storage allocator for C programs focusing on space utilization and speed
- Optimized space utilization and throughput by minimizing fragmentation with an nth-fit search and a segregated list, and by decreasing minimum block size