BENJAMIN LI

liben002@bu.edu https://github.com/liben002 https://benjaminli.site

Education

Boston University

B.S. in Computer Engineering B.S. in Electrical Engineering GPA: 3.87/4.0 (Dean's List) Sep 2018 – May 2022 (exp.)

Relevant Courses

Computer Architecture Multicore & GPU Programming Semiconductor Fabrication Embedded Systems Computer Networking Operating Systems

Skills

Languages

C/C++ Java Verilog Python

Technologies

Linux
Git
PCB Design
RTL Design
Computer Networks

Competitions

SC21 Cluster Competition

Team Captain Top 3 Benchmarking Nov **2021**

International Collegiate Programming Contest

Co-Captain Regionals Jan **2021**

SC20 Cluster Competition

Team Captain Nov **2020**

Codestellation

First Place Nov **2019**

Hack the Heights

First Place Apr 2019

Experience

Microsoft Redmond, WA

Software Engineering Intern

May 2021 - Aug 2021

- Developed Windows application to facilitate automated bulk file uploads to Azure Digital Asset Management using .NET WPF and internal Microsoft APIs
- Collaborated with Data Center Construction team to identify core business functionality that application would need to provide, and designed overall software architecture
- Revamped previously absent API documentation

Hewlett Packard Enterprise

Andover, MA

DevOps & Big Data Software Engineering Intern

May 2020 – Present

- Built Ingest Microservice for collection of data-center statistics from HPE RDA Domino using Java, Kafka Streams, and shell scripting.
- Spearheaded effort in developing and implementing CI/CD roadmap for Infosight Big Data service, including integration with Jenkins, Artifactory, and Kubernetes.

Boston University Integrated Circuits & Systems Group

Boston, MA

Undergraduate Hardware Researcher

January 2020 - May 2020

• Added vector extension capabilities to Blackparrot, a linux-capable accelerator host multicore CPU, using Verilog for architecture implementation.

Rocket Software Waltham, MA

Software Engineering Intern

Jun 2019 - Dec 2019

 Modernized an IBM Zowe (Mainframe OS) data recovery service to leverage the Java Spring Framework instead of raw servlets for integration with REST API.

Projects

drugML, Personal, In-Progress

Research tool that predicts drug-disease relation based on molecular properties. Consists of a decoupled React front-end and Flask back-end, with a CI/CD process to automate data ingestion. Developed as a collaboration with two other classmates. Engineered deep learning model using Tensorflow and back-end API using Flask. Currently hosted on AWS.

Raspberry Pi/Jetson Computing Cluster, BU High Perfomance Computing 14-node mixed Raspberry Pi/Jetson Nano cluster, currently being run for protein-folding workloads. Coordinated club members to build cluster, soldered custom DC power supplies for individual nodes, and oversaw cluster management.

WikiWhere, Personal **%** https://wikiwhere.rciliberto.com/ **O** wikiwhere/wikiwhere Graph-based visualization of hyperlink connectivity among Wikipedia articles. Optimized shortest path algorithm by implementing a multi-threaded, bi-directional, Breadth-First Search of Wikipedia article data. Developed with OpenMP, C++ and SQL for application backend, and D3 for frontend graph visualization.

Leadership

Instructor, CS200 Applied Problem Solving

May 2021 – Present Apr 2020 – Present

President, Boston University High Performance Computing Club