BENJAMIN LI

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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

Digital VLSI Circuit Design Computer Architecture Multicore & GPU Programming Semiconductor Fabrication Embedded Systems Computer Networking

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 Data Center Engineering

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 Scale-Out Data Platforms

Andover, MA

DevOps & Big Data Engineering Intern

May 2020 - Dec 2020

- 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

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 Zowe OS

Waltham, MA

Boston, 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

% https://drugml.site ♠ drugML

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

14-node mixed Raspberry Pi/Jetson Nano cluster, currently being used for club workshops. Coordinated members to build cluster, soldered custom DC power supplies for individual nodes, and oversaw cluster management.

% https://wikiwhere.ciliber.to/ • wikiwhere/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

March 2022 - Present **Mentor** Boston University Cluster Competition Team Instructor CS200: Applied Problem Solving May 2021 - Present **Founder** Boston University Competitive Programming Team Jan 2021 - Present President Boston University High Performance Computing Club Apr 2020 - Present