# 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**

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 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 - 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**

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.

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