BENJAMIN **LI**

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https://liben002.xyz

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 – 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 — **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 Zowe OS — **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 — *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 — *https://wikiwhere.rciliberto.com/* *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

Mentor Boston University Cluster Competition Team — March 2022 – *Present*
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*