

JUSTIN WU

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EDUCATION

University of California, Berkeley

Expected: May. 2024

B.A. in Computer Science | GPA: 3.7/4.0

- **Coursework:** Data Structures, Algorithms, Computer Architecture, Operating System, Computer Networks, Optimization Models, Machine Learning
- **Leadership:** Officer, Computer Science Undergraduate Association (CSUA)

TECHNICAL SKILLS

Languages: Java, Python, Scala, SQL, JavaScript, HTML/CSS, C, C++, C#, SIMD, x86, Assembly, RISC-V

Frameworks: .NET, React, Node.js, Flask, Angular, Scikit, Django

Developer Tools: Git, Docker, Unity, Spark, Kubernetes, Google Cloud Platform, AWS, MongoDB

Libraries: pandas, NumPy, Matplotlib, Seaborn, TensorFlow, BigDL

WORK EXPERIENCE

Intel

Feb. 2023 – Present

Research Intern

- Collaborated with two Intel staff machine learning engineers on an in-depth study of Intel's BigDL, a distributed deep learning library for Apache Spark, acquiring hands-on experience with technologies such as Scala, Spark MLlib, and Tensorflow
- Developed a suite of Jupyter tutorial notebooks on Scala and Spark focusing on different aspects of BigDL such as data preprocessing, model training, and performance tuning
- Assisted in the preparation of a comprehensive technical report on BigDL, detailing its architecture, usage scenarios, and advantages over other similar frameworks

Blum Center

Jul. 2022 – Present

Web Developer

- Created responsive website pages using HTML, CSS, and JavaScript, resulting in a 18% increase in website traffic due to improved user experience and faster page load speed
- Integrated RESTful API and optimized database queries using MySQL to enhance website security and reduce server response time by 50%
- Conducted regular code reviews with a team of 3 for potential bugs to ensure high code quality and maintainability

PROJECTS

GeoAttendance | Python, Angular.js, Express.js, Node.js

Jan. 2023

- Programmed a mobile application for tracking lecture and discussion attendance using the Google Geofencing API
- Built the application using Node.js-based web frameworks like Express, and utilized user authentication libraries like Passport.js and Auth0
- Leveraged the Google Maps Platform API to provide geofencing functionality, storing attendance data in MongoDB using a RESTful API for data management and communication

Gitlet | Java

Jul. 2022

- Coded a recreation of Git version control system using various data structures with an emphasis on readable code and clear design documentation
- Implemented algorithms and abstract data structures to improve time complexity per Big-O specification
- Utilized various Unix system tools to create additional bash scripts for testing

Build Your Own World | Java

Jul. 2022

- Developed a game engine that generates pseudo-random, interactive world for a dungeon-like game
- Implemented A* algorithm and minimum spanning tree for finding the shortest path between a player and target on the map
- Integrated a replay feature using file serialization to persist generated worlds and reload every user input