Louie Joshua Labata

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EDUCATION

University of California, Berkeley, GPA: 3.9

Expected May 2026

Bachelor of Science in Electrical Engineering and Computer Sciences

Relevant Coursework: The Structure and Interpretation of Computer Programs, Data Structures, Micromouse

Diablo Valley College

July 2021 - May 2022

Relevant Coursework: Introduction to Robotics, Intro to Technical Drawing, Assembly/Fabrication Workshop

RELEVANT EXPERIENCE

Cal NERDS May 2023 - June 2023

Data Validation Summer Intern

Berkeley, CA

- Validated the data of the UC Berkeley website, <u>STAR</u>, containing over 200+ STEM resources.
- Involving: geolocating campus spaces using ArcGIS Survey123, verifying data, archiving data, web content editing, blog development, social media posting, and project management using Basecamp.

Benchmark Electronics June 2022 - Aug 2022

Process Feedback System Intern

Concord, CA

- Modeled 3D parts and created their technical drawings on Solidworks for integration into the Process Feedback System.
- Researched and documented the process that utilizes Bluetooth calipers with workstations saving operators time from manually entering dimensions and paving the way for future implementation.

PROJECTS

Build Your Own World | Java, StdDraw, Git, Github

- Designed a procedurally generated pseudo-random 2D tile-based map engine.
- Implemented persistence that allows players to load and or "replay" the previous game state, visually displaying all of the actions taken in that saved game with options for control such as pause and play.
- Developed a user interface and created animations using Princeton's StdDraw library.

Gitlet | Java, Git, Github

- Implemented a version-control system that mimicked basic features of Git.
- Utilized various data structures and algorithms.
- Supported Features: commit, init, add, rm, log, global-log, find, status, restore, branch, switch, reset, merge.

Personal Portfolio | Javascript, CSS, HTML, React, Git, GitHub

Portfolio | Github

Developed a website portfolio showcasing my experience and projects using front-end technologies.

Micromouse | Python, Circuit Python

- Assembled a maze-solving robot car by soldering components together.
- Programmed autonomous navigation through the usage of sensors and PID loops.

SKILLS

Languages: Java, Python, C++, CSS, HTML, Javascript, Scheme, SQL

Frameworks & Tools: React, StdDraw

Software: Git, SolidWorks, Fusion 360, Google Workspace, MS Excel