Brandon Wong

(916) 823-1522 | bwong928@berkeley.edu | www.brandogn.com

Education

University of California, Berkeley Berkeley, CA

Bachelor of Arts in Computer Science | GPA: 4.0 *Expected 2025*

Coursework: Struct. and Interp. of Computer Programs, Data Structures, Algorithms, Foundations of Data Science, Linux Systems Administration, Discrete Math, Probability Theory

Experience

Electrical Team Member September 2022 – Present

Pioneers In Engineering *Berkeley, CA*

- Participated in club meetings, volunteered in Fall Robotics Competition 2022 promoting STEM education for under-served Bay Area high school students; 700+ students in 30+ schools (pioneers.berkeley.edu)
- Designed the PCB for a keyboard macropad to learn the basics of KiCad circuit design software and soldering.

Academic Intern January 2022 – May 2022

UC Berkeley EECS Department *Berkeley, CA*

- Facilitated and guided weekly lab sessions for CS 10, an intro CS class serving 150 students.
- Assisted students in learning problem solving and debugging skills, and fostered a welcoming environment in lab. (lab duties included: checkoffs, assisting in debugging code, answering conceptual questions)
- Taught basics of computing in Snap! and Python. (cs10.org: Recursion, Algorithmic Complexity, OOP, etc.)

Security Officer September 2022 – Present

UC Berkeley Library *Berkeley, CA*

- Documented detailed yet concise daily activity reports, and communicated via radio codes/security protocol.
- Independently patrolled multiple libraries with attention to property damage, suspicious personnel and other details; familiarized self with procedures/floor plans for each library.
- Responsible for multiple key sets, radio equipment, opening procedures, and effectively communicating with coworkers, library staff, and library patrons.

BOOST Program Mentee June 2017 – May 2021

Boost@BerkeleyHaas *Berkeley, CA*

- Presented social media marketing plan to Oakland A's to assist in their mascot campaign.
- Developed and presented mock startup (a software alternative to Yondr phone pouches).

Projects

Gitlet | *Java* July 2022

- Mini recreation of Git version control system (13 Git commands); built from scratch using Java and various Data Structures with an emphasis on readable code and design; created additional bash scripts for testing.
- Uses serialization for persistence, utilized algorithms to optimize commands for specified big O runtimes.

Build Your Own World | *Java* July 2022

- A program that generates 2D playable worlds; built in Java using a modified version of a tile rendering engine.
- Uses data structures to generate pseudo-random worlds and interactions.
- Uses serialization to persist world states and settings.

Scheme Interpreter | *Python* April 2022

- Implemented the core features for a lisp interpreter in Python using a recursive descent parser and evaluator.
- Utilized significant understanding of lexical and syntactic analysis as well as input parsing.
- Implemented tail recursion through trampolining to optimize space complexity.

Technical Skills

PROGRAMMING: Java | Python | HTML/CSS/JS | Shell | Scheme | Rust
FRAMEWORKS/LIBRARIES: JUnit Testing, React, NumPy
PLATFORMS: Linux/UNIX, Git, LaTeX, Intellij, Nvim, Adobe Illustrator, Adobe Premier, FL Studio
INTERESTS: Graphics, 3D Modeling (Blender), Music Production, Art, Drawing