

BENJAMIN GILBERT

(415) 858-3170 | begilbert238@gmail.com | San Francisco, CA | <https://bengilbert.net/>

EDUCATION

University of California, Los Angeles (UCLA), Los Angeles, CA

Graduated June 2023

Bachelor's Degree in Computer Science & Linguistics

- Theoretical CS Coursework: Optimization Algorithms, Graphs, Automata & Turing Machines, AI & Machine Learning
- Technical CS Coursework: C++, Java, React, Python; Git; Databases; Web Development with React/Typescript
- Linguistics Coursework: Symbolic Logic, Syntax and Semantics, Natural Language Processing

EXPERIENCE

The Coder School, San Francisco, CA

Programming Tutor

May 2020 - Present

- Design curriculums and deliver engaging lectures to teach fundamental and advanced concepts in computer science
- Work on numerous projects in Python, Java, C#, and HTML/CSS, fostering hands-on learning experiences tailored to different skill levels
- Collaborate with high school students to help achieve full scores on the AP Computer Science A exam, including facilitating practice exams and giving targeted feedback
- Conduct thorough code reviews and give constructive comments to students, improving coding proficiency
- Provide mentorship and guidance to newer instructors, sharing expertise in effective teaching practices and promoting good programming conventions, such as code readability and maintainability

UCLA, Los Angeles, CA

Information Technology Technician

June 2022 - June 2023

- Installed and configured software development tools and environments, including IDEs, version control systems, and helped in connecting to university Linux environments for students needing assistance in CS coursework
- Worked with campus developers to create training materials for software engineering tools and practices, providing tutorials to students and faculty to improve software understanding and proficiency
- Offered daily over-the-phone technical assistance to students, guiding through the process of connecting to campus Wi-Fi and troubleshooting connectivity issues

PROJECTS & SKILLS

Crossword Building App, <https://make-your-own-crossy.vercel.app/>

Typescript/React, NextJS C++, WebAssembly, PostgreSQL

- Developed an intuitive crossword building application from conception to deployment on NextJS
- Developed RESTful APIs enabling smooth communication between frontend and PostgreSQL database
- C++ into WebAssembly to optimize the computational-heavy task of generating crossword boards
- Leverages the versatility of Typescript/React for a dynamic user interface, while harnessing C++'s speed for high-performance execution, all on a client-side web environment

Chatroom Statistics Generator, <https://muffinstats.net/>

Python/Django, PostgreSQL

- Created an application providing detailed statistics about Discord servers
- Integrated Discord OAuth for user authentication into Django, enabling users to log in using their Discord accounts
- Implemented asynchronous programming with Python to handle high-volume data processing and improve application performance
- Designed an intricate PostgreSQL database schema to efficiently store and retrieve chat data
- Deployed the application on AWS using EC2 for scalability and accessibility

2048 CLI, <https://github.com/begilbert-sys/2048-in-C>

C

- Designed and implemented a command-line version of the popular game 2048 from scratch using the C programming language.
- Utilized algorithmic techniques to design core game mechanics, including tile movement, merging, and score calculation, ensuring adherence to the rules and objectives of the original 2048 game
- Implemented ANSI escape codes to introduce color-rich elements into the command-line interface for visual appeal