Desmond Chi

2769 Somerset Place Rowland Heights, CA 91748 desmond.chi.g@gmail.com (626) 624-3912 linkedin.com/in/desmondchi github.com/desmondcchi

EDUCATION

University of California, Riverside | *B.S. in Computer Science*

Riverside, CA | September 2021 – December 2024

• Cumulative GPA: 3.9/4.0 | Chancellor's Honors List

John A. Rowland High School

Cumulative GPA: 4.25/4.0International Baccalaureate

Rowland Heights, CA | August 2017 - June 2021

Relevant Coursework: C++ OOP & DSA • Machine Learning/Artificial Intelligence • Information Retrieval • NLP • Software Construction and Design • Machine Organization and Assembly • Compilers • Operating Systems • Embedded Systems • Discrete Structures and Math

EXPERIENCE

Google SWE Intern (Search) | Internship

New York City, NY | June 2024 - September 2024

- Spearheaded the development of a user-facing Search feature for food recipe entity cards, resulting in a 5.72% increase in growth with recipe content.
- Reduced vertical onboarding time by ~1 week and decreased feature maintenance costs by integrating dynamic refinement chips and automated subtitle generation. Increased user satisfaction by 2%.
- Implemented a scalable fulfillment path that retrieves higher-quality metadata.
- Played a key role in achieving an increase in overall Search growth and improvement in key impact metrics.

Google STEP Intern (Search) | *Internship*

Bellevue, WA | June 2023 – September 2023

- Developed a feature to recommend categories for creators and social media webpages by utilizing embeddings.
- Constructed several Flume pipelines to filter, analyze, and compute the similarity of embeddings and generate clusters.
- Optimized a bottom-up clustering algorithm via hyperparameter tuning, which improved the cohesiveness of the clusters and increased cluster coverage by 41% on average.
- Utilized C++, parallel data processing (Flume), and machine learning concepts and skills such as embeddings, unsupervised learning, and clustering algorithms.

Google STEP Intern (Cloud Tech Infrastructure) | Internship

Madison, WI | June 2022 - September 2022

- Developed a full-stack Cloud Tech Infrastructure dashboard that analyzes RPC latency for a distributed file system proxy service.
- Learned and utilized SQL, C++, Object-Oriented Programming, Version Control, HTML, CSS, and JavaScript.
- Gained knowledge and experience in the software engineering industry from full-time engineers.

Google Computer Science Summer Institute (CSSI) 2021 | Internship

Remote | July 2021 - August 2021

- Learned programming concepts such as algorithms, loops, logical/conditional statements, functions, classes, etc.
- Completed 14 different code-along projects throughout the four-week program.
- Applied learned concepts and collaborated on a final team project: Pomodoro timer Chrome extension.

PROJECTS

C++ SDL2 2D Game | Personal Project

July 2023 - Present

- Developed a 2D game engine with the SDL2 library as the basis for the "bullet hell" game.
- Applied and practiced software engineering design principles and paradigms throughout game development.
- Utilized Git for version control and Google frameworks and tools such as GoogleTest, GoogleMock, and Bazel.

Pomodoro Productivity Chrome Extension | Collaborative Project

August 2021

- Utilized JavaScript, HTML, and CSS to program and create a Chrome extension.
- Collaborated with other Google CSSI students to create project and utilize source control (GitHub).
- Programmed a Pomodoro study timer, top-down shooter game, and drawing pad (components of the Chrome extension).

Java/Spigot API Minecraft Game Development | Personal Project

July 2020 - August 2020

- Applied programming concepts learned in high school AP Computer Science courses to create a plugin for a Minecraft freeze-tag game.
- Learned to utilize GitHub for source control.
- Debugged, tested, and played the game with friends throughout the process of programming the project.

SKILLS

Programming Languages: C++, Python, Java, JavaScript, TypeScript, SQL, HTML, CSS, GCL **Tools/Frameworks:** Git, Unix, Bazel, GTest, GMock, Protobuf