

George Wu

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Education

University of California, San Diego – BS in Computer Engineering | Minor in Economics – 3.89/4.0 GPA

- Expected graduation date – June 2025
- Courses – Data Structures, Algorithms, Software Engineering, Deep Learning, Operating Systems, Networks

Professional Experience

Software Engineer Intern

San Francisco, CA

Atlassian

Jun 2023 – Sept 2023

Commerce IT

- Developed and implemented an end-to-end permission control system for an internal approval workflow tool.
- Designed Role Based Access Control (RBAC) architecture, including role, permission, and resource definitions.
- Implemented HTTPS clients and API calls using Java Spring Boot to manage groups, roles, and permissions.
- Composed and executed SQL queries to amend PostgreSQL database with new and updated entities.

Software Developer Intern

San Diego, CA

Bentley Systems Inc.

Jun 2022 – Sept 2022

Enterprise Systems

- Developed consumer requested features on Project Insights product through the .NET developer platform.
- Created and designed schema importation dropdown and modal popup using React, Angular, and Redux.
- Implemented new import settings role to the current role-based access control framework using C#.
- Tested code by writing unit and integration tests in C# to improve code reliability.
- Updated project packages to eliminate security vulnerabilities using the NuGet Package Manager.
- Cross validated webpage solutions with Azure DevOps by integrating with build, release, and deploy pipelines.

Personal Projects

Lead Software Developer

San Diego, CA

Chess Website

Jun 2021 – Present

- Built an interactive frontend chess UI with JavaScript, HTML, and CSS.
- Implemented core chess game logic and abstract data types using Python.
- Developed a backend web socket API using Flask to enable immediate data transfer and multiplayer capability.
- Designed a SQLAlchemy database to store past chess game data.
- Optimized web application performance through caching session data, reducing load times by over 50%.

Extracurricular Involvement

Algorithms Developer

San Diego, CA

Triton Unmanned Aerial Systems

Oct 2021 – Present

- Developed backend path planning framework to communicate with the onboard server.
- Implemented a Real-Time Rapidly-exploring Random Tree (RRT*) path planning algorithm using Python.
- Refactored obstacle implementation to use data classes to improve runtime and code conciseness.

Software Developer

San Diego, CA

Yonder Deep

Oct 2021 – Present

- Designing and programming an Autonomous Underwater Vehicle (AUV) for oceanographic research.
- Implemented radio address mapping code to enable multiple radio connections.
- Developed movement methods test suite to validate AUV motor function.

Skills

Languages

Python, Java, C/C++/C#, JavaScript, TypeScript, HTML, CSS, SQL

Technologies

PyTorch, Flask, Node.js, SQLAlchemy, NumPy, Pandas, Git, Bash, Make, PyQt, React, Angular, Redux, .NET, NuGet, npm, Android Studio, Github Actions CI, Junit, Spring Boot