JACK CHANG
PROGRAMMER

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EDUCATION

UC Irvine
Computer Science
Class of June 2026
GPA: 4.0

Mentorship with Ex-Google Game Studio Founder
(Good Trouble)
May 2023 - Aug 2023

RELEVANT COURSEWORK

Intro to Data Structures
Advanced Python
Discrete Structures

Other Programs:
UCSD COSMOS (2021)

SKILLS

Proficient:
Python, Node JS, Electron JS, C++, Java, Unity & C#

Familiar:
Git, HTML/CSS, Windows, Linux, PC Hardware

HOBBIES

Chess; rated 2200 on chess.com
Jazz guitar player

WORK EXPERIENCE

Software Engineer
AI Tech Knowledge (June 2023 - Present)
- Use NodeJS to develop a service for Windows and Mac to queue and solve models for an AI scheduler webapp
- Use C++ & Python with Google's OR-Tools library for constraint optimization, and multithreaded cores for faster runtime
- Use ElectronJS to create an authenticator app that communicated with Supabase

Research Scientist
MetaGuru (June 2023 - November 2023)
- Researched the capabilities of ChatGPT, possible training and modifications, and cross language limitations
- Using GPT-4 from OpenAI's API in Python, developed a preliminary language model that helps employees understand the company by answering questions normally asked to human resources

Intern Game Programmer
Good Trouble (October 2022 - March 2023)
- Gained practical experience in gameplay programming and enhanced my C# & Unity mastery, problem-solving + debugging competency, and communication skills
- Designed and created the aiming system and UI menu for a car racing and shooting game for the PC and Xbox platforms, using Unity's new input system, and object pooling to optimize projectiles

Curriculum Developer & Instructor
NexStream Technical Education (May 2022 - May 2023)
- Developed and taught an Introduction to Pygame & Advanced Pygame programming course in Summer 2022
- Developed and taught a Python-based Bronze level USA Computing Olympiad logic and algorithms courses in the 2022-2023 school year, and developed a Silver level course for Summer 2023

PROJECTS

- **RPG Bot (2022, sole developer):** An interactive dungeons Discord bot made using Python, it allows players to use text commands to earn valuable loot and gear up a character in a fantasy world
- **Island Escape (2021, sole developer):** A turn-based puzzle game made using an altered version of the TKinter library in Python, where the player tries to outrun exploding robots and dodge mines

TESTS/AWARDS

- Eagle Scout (Oct 2021)
- C++ Certified Professional Programmer through C++ Institute (Jan 2021)
- CompTIA A+ Certified (July 2020, renewed July 2023)
- USA Computing Olympiad Gold Division Member (April 2020)