Joshua Zhang

408-888-8361 | jzhang0224@gmail.com | joshuazhang.vercel.app | linkedin.com/in/teddygat0r | github.com/Teddygat0r

EDUCATION

University of Washington — June 2027
GPA: 3.94, B.S. in Computer Science — *Seattle, WA*
Relevant Coursework: Data Structures and Algorithms, Systems Programming, Distributed Systems

EXPERIENCE

Stripe — June 2025 - Sept 2025
Software Engineering Intern — *Seattle, WA*
- Incoming SWE Intern on Tax Infrastructure Team in Stripe Core Technology Org.

Amazon — Jan 2025 - June 2025
Software Engineering Intern — *Seattle, WA*
- Integrating legacy **ASP.NET** (C#) code with modern Amazon books frameworks.
- Implemented table pagination and server side database processing and optimized **SQL** queries to achieve a 98% increase in speed in a Brilliance Publishing internal tool.

Art of Problem Solving — June 2024 - Sept 2024
Software Engineering Intern — *San Diego, CA*
- Worked in an **Agile** team environment to develop an online placement exam using **React**, allowing students to qualify for AoPS Academy courses from home, used by over **20,000** students across 12 campuses.
- Constructed a RESTFUL API to serve as middleware using **Node.JS** to integrate the frontend site to an outdated **PHP** server and **PostgreSQL** databases.
- Wrote unit tests using **Jest** and end to end tests using **Cypress** to ensure development stability.

Advanced Robotics at UW — Sept 2023 - Sept 2024
Controls Team Software Developer — *Seattle, WA*
- Developed a Python-OpenCV system for real-time red square detection, 3D pose estimation, and serial communication of target orientation data.
- Maintained Taproot, an open-source embedded systems framework written in **C++** for Robomaster robots.

Department of Homeland Security — June 2023 - Aug 2023
Software Engineering Intern — *Washington D.C.*
- Used **Python** to develop a system enabling users to submit lengthy documents to a locally hosted large language model (LLM) and query it for relevant information.
- Improved the accuracy and reduced hallucinations of LLMs in answering prompts by **30%** integrating ChromaDB Vector Database to the LLM through **LangChain**.
- Modeled the LLM API after an OpenAI API server, allowing it to communicate with the LangChain tool.

PROJECTS

Spotify Recommender | *Python, Flask, Scikit-learn, NextJS, React, Typescript, Tailwind*
- Used Manhattan distance formulas to generate vector embeddings for 12,000 songs in **Python**.
- Built a frontend using **React**, giving users a graphical visualization of songs and their recommendations.

WildEye AI | *Flask, Tensorflow, NextJS, React, Typescript, Tailwind, Python*
- Built a wildlife-spotting camera, powered by an **NVIDIA Jetson Nano**, that can be tucked into your backyard to automatically snap pictures and recognize animals that wander by.
- Trained a model using **Tensorflow**, identifying 90 different animal species with an 86% test accuracy.

TECHNICAL SKILLS

Languages: Typescript, Javascript, NodeJS, Python, C++, Java, SQL, HTML/CSS, Bash
Frameworks: React, Tailwind, Tensorflow, Flask, Django, PyTorch, Spring, Express, ChromaDB, LangChain, ASP.NET
Developer Tools: Git, Microsoft Azure, Google Firebase, Figma, VSCode, Docker, Kubernetes
Libraries: Pandas, NumPy, Matplotlib, Strapi, Storybook, Jest