Anthony Chen

Skills

Languages | Python, C++, C, Java, JavaScript, TypeScript, Bash, SQL, PHP, Solidity, PowerShell, Scala, VHDL **Tech** | Django, DynamoDB, EC2, Flask, Lambda, MongoDB, Node.js, NumPy, PostgreSQL, Qt, React, S3 **Development** | GDB, Ghidra, Git, GitHub, Gradle, GTest, Linux, Make, Pytest, Snap, Valgrind, Wireshark

Experience

Software Engineer Intern

May 2024 – Aug 2024 *Vancouver, Canada*

Amazon

• Designed and implemented **20M+ row** data warehouse microservice with live updates and ETL operations

- Created Athena database for on-call developers, supporting standard SQL and speeding up queries by 30x
- Developed BFF and React UI allowing other teams to submit sanitized queries, view results, and export data
- Wrote backfill script, configured automatic backups, and imported **4 years** of past data into the warehouse

Software MemberWaterloo Rocketry
May 2023 – Present
Waterloo, Canada

Created telemetry dashboard and set up sensors to monitor operations-critical data during 5 engine tests

• Maintained rocket engine simulator and migrated 10+ simulation parameters to new configuration system

Team Captain

Jun 2022 - Jun 2023

FIRST Robotics Competition

Toronto, Canada

- Co-founded team, recruiting 100+ students, raising \$75,000+, and planning 20+ technical workshops
- Led software team to create autonomous code, PID controller, and acceleration profiles for robot drivetrain

QA Engineer May 2021 – Aug 2021

RubixDAO Remote

- Contributed to decentralised lending platform with cryptocurrency collateral and a USD-pegged digital token
- Wrote 90+ smart contract tests with Pytest to achieve 100% test coverage, implemented on-chain demo

Projects

- **𝚱 UWMap** | C++, ESP32, FastAPI, Next.js
 - Programmed and deployed 8 ESP32 microcontrollers across campus to track and report crowd density
 - Collaborated with other developers to create and deploy map with real-time updates and historical data
- Odgecoin-unofficial | Bash, GitHub, Linux, Snap
 - Investigated 40+ reports of issues from Linux users attempting to install the official Dogecoin Core software
 - Wrote Bash scripts to retrieve official binaries, verify cryptographic developer signatures, and run 250+ tests
 - Packaged Snap for amd64, arm64, and i386, active users in 35+ countries, accepted and merged upstream
- COSine | CSS, HTML, Node.js, React
 - Won 2nd Overall at Major League Hacking's PrideHacks event with a participatory multimedia experience
 - Integrated OpenAI LLM with pre-determined story paths to enhance awareness of modern social issues
- - Jointly created Flask platform with 1300+ registered users to host interactive cybersecurity challenges
 - Used CAPTCHA, backups, rate limiting, and 2FA to ensure 99.99% availability and prevent data breaches

Education

University of Waterloo

Bachelor of Software Engineering, Honours

Combinatorics and Optimization Minor

Sep 2023 – Present Waterloo, Canada 85% Cumulative Average

• President's Scholarship of Distinction, Cohort Academic Representative