Anthony Chen

Skills

Languages: Python, C++, C, Bash, Java, HTML, CSS, JS, TypeScript, PHP, SQL, Solidity, Kotlin, PowerShell, GLSL **Technology**: Flask, WPILib, Node, React, PyCrypto, Bootstrap, jQuery, Django, MongoDB, SFML, NumPy, Pygame **Development**: Linux, Git, GitHub, Pytest, Snap, GDB, Make, Wireshark, Valgrind, Gradle

Projects

Odogecoin-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 Gitian-generated signatures, and run 250+ wallet tests
- Packaged Snap for amd64, arm64, and i386, active users in 35+ countries, accepted and merged upstream

COSine | CSS, HTML, Node, React

- Won 2nd Overall in Major League Hacking PrideHacks, mid-hackathon rebuild from JavaScript to TypeScript
- Integrated OpenAI with prewritten storylines to generate interactions that **enhance societal awareness**

CTFOJ | Bootstrap, Pytest, Python, SQL

- Collaboratively created Flask platform with **1200+ registered users** to host interactive security challenges
- Implemented admin console, logs and 90% coverage with Pytest; fixed Markdown render and SQL bugs
- Used CAPTCHA, backups, rate limiting, and 2FA to ensure 99.99% availability and prevent security breaches

2022-robot | C++, GitHub, Gradle, WPILib

- Led a team of 4 developers to create autonomous and tele-operated code to control drivetrain subsystem
- Wrote control code using slew rate limiting with a PID controller to improve robot acceleration and turning

Superlumic | C, C++, GDB, Valgrind

- Designed encrypted password manager with **easy migrations** from or to other password management apps
- Ensured user safety with GCC compiler hardening flags, provided Makefiles, and fully reproducible builds

Experience

Captain *FIRST Robotics Competition Team 8574*

Jun 2022 – Jun 2023

Toronto, Canada

- Co-founded team, recruiting 120+ students and raising \$75,000+ with demonstrations and outreach events
- Led team to qualify for and compete in world championships with **daily meetings** during inaugural season
- Coordinated build process by planning 20+ workshops for the building, electrical, and software subteams

Co-Founder Oct 2020 – Jun 2023

MGCI CTF (Cybersecurity) Club

Toronto, Canada

- Promoted security awareness with weekly workshops on cryptography, forensics, and OSINT research skills
- Organised contests and created challenges with 150,000+ total submissions on the above CTFOJ platform

Web ManagerMay 2022 – May 2023The ReckonerToronto, Canada

• Used Cloudflare caching, AWS EC2, and GCP to reduce hosting costs by 50% and improve site availability

- osed cloudinare caching, Avis Ecz, and Ger to reduce hosting costs by 50% and improve site availability
- Consulted with admin and students to identify and resolve UI pain points on the 2000+ monthly hits site

Education

University of Waterloo

Bachelor of Software Engineering, Honours

Sep 2023 – Apr 2028 Waterloo, Canada

- Cohort Academic Representative
- Amazon Future Engineer Scholarship
- Ted Rogers Future Leader Scholarship