# **Anthony Chen**

## **i** 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

- **O** dogecoin-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
- **OSINE** | 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**
- **𝚱** 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
- **𝚱 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
- **𝚱** 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

## **Customer Service Representative**

Apr 2023 – Sep 2023

City of Toronto

Toronto, Canada

• Resolved complaints, queried city databases, and acted as IT support for 25+ aquatics staff and programs

#### **Captain and Co-Founder**

Nov 2021 – Jun 2023

FIRST Robotics Competition Team 8574

Toronto, Canada

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

**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 Manager May 2022 – May 2023

The Reckoner Toronto, Canada

- Used Cloudflare caching, AWS EC2, and GCP 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**

Waterloo, Canada

Sep 2023 - Apr 2028

Bachelor of Software Engineering, Honours

Combinatorics and Optimization Minor

• Ted Rogers Future Leader Scholarship, Cenovus Energy STEM Scholarship, Marc Garneau Alumni Scholarship