

# Shane Chen

✉ [zshanechen@gmail.com](mailto:zshanechen@gmail.com) | 🌐 [shanechen.ca](http://shanechen.ca) | 🏠 [mars-flat](#) | [in shanezchen](#)

## EDUCATION

### University of Waterloo

*Bachelor of Computer Science, Honours*

Waterloo, ON

*September 2024 - Present*

- Excellent Standing - 3.98/4.0 Cumulative GPA

## SKILLS

**Languages:** Python, Java, C, C++, JavaScript, Typescript, HTML, CSS, SQL, Powershell, Bash

**Technologies and Frameworks:** React, Git, Django, Pandas, Node.js, PostgreSQL, GraphQL, Postman

**Productivity and Design Tools:** Jupyter Notebook, Microsoft Office 365, Canva, LaTeX, LLM

## EXPERIENCE

### Project Metropolis

*Lead Mobile Developer*

Toronto, ON

*December 2021 - July 2024*

- Led a team of five to design, develop, and maintain a production-grade cross-platform mobile app using React Native, delivering a seamless user experience on both iOS and Android
- Optimized CI/CD pipelines using Git and Expo, streamlining deployment and scaling the app to **800+** users
- Designed and implemented a dynamic event calendar with push notifications using React and CSS, integrating scheduled events and descriptions from a Django REST API

### Mackenzie Computer Programming Team

*President*

Toronto, ON

*September 2023 - June 2024*

- Maintained and administrated [mcpt.ca](http://mcpt.ca), an online judge built on Django with **1400+** users
- Authored **30+** structured problems with test cases and detailed solutions in Java, Python, and C++, collaborating with curriculum leaders to teach core computer science principles
- Hosted **6** programming contests with **100+** participants, providing preparation for national-level competitions

## ACHIEVEMENTS

### Mathematics National Scholarship

*University of Waterloo*

Waterloo, ON

*May 2024*

- One of 10 recipients of a **\$12,000** scholarship awarded for exceptional academic performance, extracurricular involvement, and outstanding results in national math contests and the Canadian Computing Competition

### CyberPatriot Finalist

*Cybersecurity Competition*

Remote/Toronto, ON

*October - May 2024*

- Placed **99th** percentile in CyberPatriot's semifinal, securing a top-5 placement in the Canadian finals
- Used Windows SCCM to secure Active Directory and Windows workstations connected to the domain
- Created Bash scripts to automate security and policy checks, boosting competition performance by **20%**

## PROJECTS

### matchmadein.tech - Most Creative Use of Github at Hack the North X

*Matching users with others on Github who share similar commit frequencies and language familiarity*

- Optimized Github API data queries using GraphQL, allowing querying up to **100,000** users per hour
- Implemented a user-matching API using K-means clustering through Scikit and Python Flask

### Faceoffantasy

*A Custom NHL playoff fantasy platform*

- Enabled user-created fantasy leagues stored with PostgreSQL, utilizing UUIDs to ensure controlled invitations
- Developed configurable points and ranking systems using React and Redux to enhance league customization

### PANIK - Computer Science Final Project

*A video game designed to educate people on social anxiety*

- Used object-oriented programming to organize game components and support the game loop with Java
- Enhanced the user interface with custom graphics, implemented through JavaFX