

# Marven Wang

m574wang@uwaterloo.ca | 647-705-3579 | github.com/m574wang

## SKILLS

---

- Python, C, C#, Java, Racket, Typescript, CSS, SQL; React JS, REST API, Flask, TensorFlow, Git
- Wix Studio, Unity, React JS, Tailwind, Flask, TensorFlow, GitHub Actions
- MySQL, PostgreSQL, MongoDB, SQLite, Redis, Cassandra
- Docker, Kubernetes, AWS, Azure, GCP
- Selenium, PyTest, Jest, Mocha, Chai
- Git, GitHub, GitLab, Bitbucket, CI/CD pipelines

## WORK EXPERIENCE

---

### Software Development Assistant | Apex Snow Academy Apr. 2024–Aug. 2024

- Optimized website performance, improving load times by 30% through code splitting and image compression
- Collaborated with UX designers to refine UI/UX, increasing user engagement by 15%
- Single-handedly built the backend of the student-matching system using Python and TensorFlow, achieved a 20% increase in lesson hours and 13% reduction in scheduling overflow
- Implemented the company's website using Wix Studio, JavaScript, and CSS, attracted 200+ customer enrollments

### Freelance Developer | Personal Projects Jun. 2023–Dec. 2023

- Built multiple client websites using React, Flask, and Firebase; delivered 5+ projects on time

### Teaching Assistant | University of Waterloo Jan. 2025–Present

- Assist in grading assignments and leading discussion sections for Distributed Systems course (100+ students)

## PROJECTS & ACTIVITIES

---

### Pet Optimizer | International Mathematical Modelling Challenge Apr. 2024

- Led a team of 4 to develop a solution for the pet adoption situation across Canada for IMMC
- Co-authored project report and presented findings at university symposium

### Everything Calendar | React JS, Tailwind Oct. 2024–Present

- Developed a website using React JS and Tailwind to build custom calendars by scraping event sites
- Implemented user authentication and profile management with JWT in Flask
- Planned, developed, and debugged the backend REST API in Python, optimized event scraping reliability

### Grass Allergy Relief | Personal Project Sept. 2024–Present

- Integrated logging and monitoring using Prometheus and Grafana to track usage metrics
- Automated personalized resume generation using a user-created database and job descriptions
- Conducted end-to-end testing, received over 20 positive feedbacks and multiple functionality reports
- Single-handedly built a resume tailoring application in Python, generating job-targeted resumes in under 10 seconds

### Participant | Canadian National Physics Olympiad May 2023

- Published practice problem sets used by incoming camp attendees
- Achieved top 10 score in the theoretical exam portion out of 100+ participants
- Developed problem-solving and critical thinking abilities through laboratory design challenges and tests

### Personal Blog Platform | Django, React 2021

- Built a full-stack blogging platform in Django with React front-end, featuring markdown support
- Integrated social share APIs and implemented user authentication with JWT

### Volunteer Developer | Local Nonprofit 2020–2021

- Built and maintained donation tracking portal using Flask and PostgreSQL
- Trained staff on system use and generated weekly usage reports

### Hackathon Winner | Waterloo Hack Nov. 2019

- Presented demo to 200+ attendees and coordinated post-hack maintenance
- Led a 3-person team to build an AI-powered chat app in 24 hours; won Best UX

## EDUCATION

---

### B.CS. Honours Computer Science | University of Waterloo 2024–2029

- Relevant coursework: Algorithms, Data Structures, Operating Systems, Databases, Artificial Intelligence