# Marven Wang

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## 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

## WORK EXPERIENCE

**Software Development Assistant** | Apex Snow Academy                                              **Apr. 2024–Aug. 2024**
- Implemented the company\'s website using Wix Studio, JavaScript, and CSS, attracted 200+ customer enrollments
- 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
- Optimized website performance, improving load times by 30\% through code splitting and image compression

**Freelance Developer** | Personal Projects                                                        **Jun. 2023–Dec. 2023**
- Implemented user analytics dashboards and A/B tests, boosting user retention by 18\%
- Built multiple client websites using React, Flask, and Firebase; delivered 5+ projects on time

**Teaching Assistant** | University of Waterloo                                                     **Jan. 2025–Present**
- Hold weekly office hours to support student debugging and conceptual questions
- Assist in grading assignments and leading discussion sections for Distributed Systems course (100+ students)

## PROJECTS & ACTIVITIES

**Pet Optimizer** | International Mathematical Modelling Challenge                                   **Apr. 2024**
- Programmed an adoption recommendation engine in Python using a neural network with 91\% test accuracy
- Visualized model performance metrics in dashboards for stakeholder review
- 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**
- Conducted user interviews and iterated UI based on feedback, improving usability score by 20\%
- Automated personalized resume generation using a user-created database and job descriptions
- Integrated logging and monitoring using Prometheus and Grafana to track usage metrics
- 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
- Developed problem-solving and critical thinking abilities through laboratory design challenges and tests

**Personal Blog Platform** | Django, React                                                          **2021**
- Integrated social share APIs and implemented user authentication with JWT
- Built a full-stack blogging platform in Django with React front-end, featuring markdown support

**Volunteer Developer** | Local Nonprofit                                                           **2020–2021**
- Trained staff on system use and generated weekly usage reports
- Built and maintained donation tracking portal using Flask and PostgreSQL

## EDUCATION

**B.CS. Honours Computer Science** | University of Waterloo                                         **2024–2029**
- Relevant coursework: Algorithms, Data Structures, Operating Systems, Databases, Artificial Intelligence