

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%
- 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
- 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