JUE WANG

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EDUCATION

UNIVERSITY OF TORONTO — Toronto, Canada
BASc in Computer Engineering + PEY Coop — Expected May 2027
Cumulative GPA: 3.73/4.0; Dean's Honor List 2023-2024
Relevant Coursework: Software Engineering; Programming Fundamentals; Algorithms; Computer Organization

WORK EXPERIENCE

DINGTALK, ALIBABA GROUP — Hangzhou, China
Software Engineering Intern — Jun 2024 – Aug 2024

- Developed automated performance testing scripts using Python and Hypium API, measuring page load times and frame rates for 11 application pages.
- Built the frontend of DingTalk on HarmonyOS end using ArkTs, built the long-press menu for the homepage.
- Developed a web crawler and field extractor for crash analysis using Python, which parsed over 4000 lines of crash logs.

UNIVERSITY OF TORONTO ROBOTIC ASSOCIATION (UTRA) — Toronto, Canada
Website Developer — Oct 2024 – Jan 2025

- Built the frontend for seven user authentication pages using Next.js. Made partial connections to the backend by implementing the sign-up form resolver and calling the email modules.
- Implemented the Prisma schema and Zod structure for user application parts.
- Web Address | GitHub Repository

PROJECTS

PULSETRACK – WEARABLE HEALTH MONITOR — Toronto, Canada
Project Details | GitHub Repository — Feb 2025

- Team lead of a 4-person team in a 2-day hackathon: implemented a wearable device monitoring indicators, including body temperature, heart rate, and blood oxygen.
- Collected biometric data via ESP32-controlled sensors, transmitted to the backend via WiFi, and visualized data in real-time on the frontend using WebSockets.
- Responsible for building the WebSockets connection, backend development using Flask, and partial front-end using React.

GIS MAPPER — Toronto, Canada
Project Details — Jan 2025 – Present

- Designed and implemented a map software in a 3-person team at school using C++.
- Responsible for implementing the Dijkstra algorithm for navigation between two points.
- Responsible for developing algorithms (greedy, simulated annealing, 2-opt, 3-opt) to solve the Traveling Salesman Problem.
- Built partial UI parts using the EZGL library in C++.

PERSONAL WEBSITE — Toronto, Canada
Website Address | GitHub Repository — Jan 2025 – Present

- Built the personal website using React, and deployed it on Vercel.

PROTRACC.CO – POSTURE VISUALIZATION APPLICATION — Vancouver, Canada
Project Details | GitHub Repository — Jan 2025

- Designed and implemented an application that processed input video and transformed the human motion there into a 3D nodal representation for visualization.
- Responsible for building the application frontend and parsing the position JSON data of 32 nodes into an animation using Three.js.

ADDITIONAL

Computer Languages: Advanced in JavaScript, HTML/CSS, C++, C; Proficient in MATLAB, Python, SQL, RISCV assembly.
Tools/Frameworks: React, Next.js, Flask, Django, Node.js, Three.js, MongoDB, ROS.
Awards: Top 30 Students in Faculty (2024); Dean's Honor List (2023-2024); Edward S. Rogers Sr. Admission Scholarship.