Prabhjot Khera

647-897-0074 | pskhera@uwaterloo.ca | linkedin.com/in/prabhjotskhera | github.com/Prabhjot-khera

Skills

Languages: Python, C++, C, JavaScript, HTML/CSS, SQL, VHDL, MATLAB

Libraries/Frameworks: React.js, Express.js, TailwindCSS, Pandas, NumPy, Matplotlib, TensorFlow, ROS2

Software: Git, Linux, Power Platform, Azure, Google Colab, MongoDB, Postman, GitHub Actions

Experience

Software Engineer Intern **February 2024 - May 2024**

ZoRaw Sustenance Inc. *Mississauga, ON*

- Designed dynamic and maintainable product pages with JavaScript, resulting in over $50,000 in revenue
- Managed store locator page, automating data input with JavaScript and Python, and web scraped 1000+ locations with BeautifulSoup4, directly boosting revenue by ensuring up-to-date location information
- Refactored a dashboard to consolidate sales and expense data using JavaScript, improving lookup time by 100%
- Implemented integrations between QuickBooks and Shopify to increase cash flow through faster repayments by 25%

Microsoft Technology Consultant Intern **May 2023 - August 2023**

CreoSpark Consulting Services Inc. *Toronto, ON*

- Led the development of an Applicant Tracking System using the Power Platform to automate the applicant process
- Constructed and trained an AI model using AI Builder to automate résumé parsing, reducing the client's manual workload by 2 hours per week and enhancing accuracy in identifying key candidate information
- Incorporated a PowerShell script into Power Automate to enable remote management of an Active Directory (AD) on an Azure VM, eliminating the need for manual VM access

Software Developer Intern **January 2022 - August 2022**

Paradise Moving Service Inc. *Calgary, AB (remote)*

- Developed and deployed a MERN stack inventory management app on AWS EC2, streamlining the existing process
- Integrated secure authentication and authorization functionality using JWT tokens and Passport.js for 10+ users
- Led dashboard development to consolidate report data with JavaScript and Google Apps Script, enhancing data accessibility and streamlining reporting processes, resulting in a 90% time savings

Design Team

Robotics Software Developer **April 2024 - Present**

University of Waterloo Robotics Team (UWRT) *Waterloo, ON*

- Collaborated with the team to test and ensure functionality of the Mars rover's power distribution box (PDB), ensuring seamless integration with other components while adhering to project timelines
- Utilized ROS2, C++, and Python to develop and test drivechain functionality and establish an Xbox controller connection for remote rover control, resulting in improved rover maneuverability and control

Projects

Real-Time Operating System | *C, STM32*

- Embedded a real-time operating system on STM32 using C, focusing on multi-threading and memory management
- Implemented efficient interrupt handlers to ensure responsive system performance

Workout Tracker | *JavaScript, Node.js, Express.js, MongoDB, React.js*

- Developed full-stack application to track details of workouts for 4+ users using the MERN stack
- Created API endpoints for CRUD operations of MongoDB database using Express.js and Node.js

Diabetes Neural Network | *Python, TensorFlow, Matplotlib, NumPy, Pandas, Google Colab*

- Built a neural network with supervised learning to predict diabetes from feature vectors with 90% accuracy
- Utilized Matplotlib for data visualization and TensorFlow to construct a neural network

Education

University of Waterloo **Waterloo, ON**

Bachelor of Applied Science in Mechatronics Engineering, ***GPA: 3.97/4.00*** *Expected April 2027*

- Coursework: Digital Computation (C++), Data Structures & Algorithms (C++), Real-Time Operating Systems (C, STM32)