Hanzalah Patel

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EDUCATION:

Ontario Tech University April 2025

Bachelor of Engineering – Software Engineering

SKILLS:

Languages: Java, JavaScript, Python, C#, C++, C, PHP, SQL, HTML, CSS, ASP.NET, Kotlin, PowerShell, VBA

Technologies: Git, ReactJS, MySQL, Node.js, Express.js, Electron JS, Django, .NET, Linux, Bootstrap, Junit, jQuery, Docker, Kubernetes, Azure DevOps, Android Studio, Power BI, Excel

WORK EXPERIENCE:

Computer Science Intern

May 2024 – September 2024

Canadian Nuclear Laboratories - Chalk River, ON (Remote)

- Collaborated on the development of an internal machine learning model using **Python** and **SQL** to predict work package statuses, partnering with a Senior Data Engineer to create a test model that forecasted timelines.
- Designed and implemented logic checks in **ASP.NET** and **SQL** Server to enforce correct task sequencing for work packages, enhancing project scheduling accuracy and improving task dependency reliability for managers.
- Created a dynamic webpage for the S&T department using **ASP.NET** and **SQL** Server, enabling managers to efficiently track employee assignments and total hours worked by extracting and displaying work package data.

Software Engineering Intern

May 2023 - May 2024

Ontario Power Generation - Darlington, ON

- Developed a **Python** script to automate the extraction, transformation, and transfer of data between **SQL** databases, visualizing the processed data in a **Power BI** dashboard. This enabled system responsible engineers to monitor system performance and identify potential issues proactively.
- Built a software solution for managing outsourced work assignments, utilizing **SQL** and **Express.JS** for backend operations, and creating a responsive, intuitive front-end interface with **Electron JS**.
- Designed a **Power BI** dashboard for project management, integrating real-time **SQL** data to provide stakeholders with instant access to work order details, expenses, work plans, scopes, and associated projects.
- Created an Excel macro using **VBA** to extract data from **SQL** Server and present it in a user-friendly format, tailored to the needs of system responsible engineers.

Undergraduate Research Assistant

May 2022 – September 2022

Ontario Tech University - Oshawa, ON

- Developed a full-stack application using **Python** and **Django** to facilitate seamless learning of mathematical concepts for students and professors, featuring a diverse range of math questions, solution videos, transcripts, and quizzes that securely store student-related information.
- Boosted math learning efficiency by **50%** through the application enabling students to take notes, complete quizzes, and securely store all student data for faculty review, resulting in enhanced academic outcomes.

PROJECT EXPERIENCE:

September 2018 – Current

Online Grocery Store – GitHub

- Developed a full-stack website using **React** and **JavaScript**, allowing users to browse food options, manage their carts, and complete purchases, with robust user login and account management features.
- Implemented a streamlined checkout process with comprehensive form validation and error handling, enhancing user experience by ensuring smooth transactions and reducing cart abandonment.

Content Based Image Retrieval - GitHub

- Developed a **Python** program enabling users to select a reference black-and-white image for comparison, utilizing angled projections and hamming distances to achieve a **70%** success rate.
- Improved the **image comparison algorithm** and preprocessing techniques by optimizing key parameters and refining data handling, leading to faster retrieval times and greater accuracy.