Vraj Patel

SUMMARY

Aspiring Software Engineer with expertise in full-stack development, embedded systems, and database management. Proficient in Python, JavaScript, and Agile practices, with a proven track record of delivering scalable and efficient solutions. Experienced in working with diverse teams, implementing innovative projects, and enhancing product quality through automation and testing.

EDUCATION

Bachelor of Engineering - Software Engineering

Winter 2020 - Winter 2025

Concordia University · Montreal, QC

GPA: 3.31

Relevant Coursework: Software Testing, Verification and Quality Assurance, Data Systems for Software Engineers, Data Structures & Algorithms, Artificial Intelligence.

SKILLS

Primary Stack: React.js, Node.js, JavaScript, Python, Java, SQL (PostgreSQL), C# **Frameworks/Libs:** LangChain, Streamlit, Hugging Face, Bootstrap, WordPress

Methodologies: PostgreSQL, NoSQL (MongoDB), Neo4j

DeveOps & Tools: Docker, Git/GitHub, TestComplete, VS Code, Agile (Scrum/XP)

EXPERIENCE

Software Developer (Intern)

Siemens, Montreal

May 2022 - December 2022

- Developed and maintained automated test scripts (Python, C#), reducing manual regression testing time by 30% for Simcenter products.
- · Engineered developer tools including a VM management utility (C#/.NET), streamlining internal testing setup and reducing overhead.
- · Integrated within an Agile Scrum team, actively collaborating on CI/CD processes and deployment alongside core development.
- · Validated critical features and bug fixes to ensure robust software releases, maintaining production standards for product reliability.

PROJECTS

TrackMyDegree (Winner of Instructional Technology Award)

Concordia University

September 2024 - April 2025

- · Led full-stack development of a degree tracking app using React.JS, Node.js, and SQL for progress monitoring and course planning.
- · Implemented two-factor authentication (2FA) using React libraries to significantly enhance data security and user privacy.
- · Leveraged Docker for containerization to standardize development environments and simplify deployment pipeline.

SmartClass A.I. assistant

Concordia University

May 2024 - July 2024

- · Developed an AI system to classify facial expressions, achieving 85% accuracy in image emotion detection for student engagement.
- $\cdot \ \text{Designed and trained a CNN using PyTorch}, \ \text{utilizing Google CoLab for efficient model training and validation}.$
- · Conducted bias analysis using Scikit-learn and k-fold cross-validation to enhance model fairness and robustness.

Condo Management Website

Concordia University

January 2024 - April 2024

- · Developed and launched a web platform for condo service management (React.JS, SQL) including rent and maintenance tracking.
- · Built a comprehensive user profile management system to enhance accessibility for residents and administrators.
- · Implemented intuitive features for profile creation, validation, and updates to ensure a seamless user experience.

CERTIFICATIONS

Python

Hacker Rank

Java

Hacker Rank