Deval Panchal
Software Developer

Education

Ontario Tech University   Oshawa, ON
Bachelor of Science (Honours), Computer Science,
Awards: President's List Designation (2021 – 2024), Natural Sciences and Engineering Research Council of Canada Recipient (NSERC)

Key Skills

Languages: JavaScript/TypeScript, Python, C#, SQL, HTML/CSS
Libraries & Frameworks: React, NextJS, Angular, SvelteKit
Data Analysis Tools: Power BI, R
Cloud Infrastructure: Azure DevOps, Google Cloud Services

Professional Experiences

Ontario Power Generation | *Software Developer*   Aug 2024 – Present
- Develop and maintain Angular, C#, and SQL Server applications for both station-level and enterprise-wide use
- Implement CI/CD pipelines using Azure DevOps to streamline deployment processes
- Develop reporting tools using SQL Server and Power BI, used at the corporate level for performance monitoring, regulatory compliance, and executive decision-making
- Database owner of the production server responsible for ensuring data integrity, performance tuning, implementing backup strategies, and managing role-based access control
- **Technical Environment:** Angular, .NET, SQL Server, Azure DevOps

Ontario Tech University | *Software Developer Research Fellowship*   May 2023 – October 2024
- Collaborated with a Ph.D. candidate to explore AI-driven language learning methodologies, contributing to the design of 2 experimental models evaluated by over **30 participants**
- Led data collection and user studies involving **120+ participants** across **3 demographics** to assess the effectiveness of AI-powered language-learning tools, resulting in a **25% improvement** in vocabulary retention
- **Technical Environment**: ReactJS, NodeJS, ExpressJS, PostgreSQL, Docker, GitHub, Trello

Ontario Power Generation | *Data Analyst*   May 2022 – September 2023
- Maintained and cleaned SQL queries for more efficient runtimes, up to **98%** improvement in queries for data retrieval, and managed ETLs
- Created, modified, and scheduled stored procedures in SQL Server to maintain the database, seamlessly syncing them with 5+ dashboards to manage and process over **50,000+** data points efficiently
- Oversaw database operations, specializing in the modelling and data architecture design for scalable projects
- **Technical Environment**: MSSQL, Power BI, Power Apps

Projects

LingoComics | SvelteKit, Firebase, Docker, OpenAI-API
Angular, .NET Core
- Developed a full-stack innovative AI-centered language learning web application with SvelteKit and Firebase
- Implemented a *Story Designer* feature using OpenAI's DALLE-3 and GPT-4-Turbo API's to generate situational stories