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

Professional Experiences

Ontario Tech University | *Software Developer Research Fellowship*   May 2021 – October 2024

- Spearheaded full-stack development for a web-based language learning application, with a strong focus on UI/UX
- Utilize prototyping tool Figma to develop a wireframe during the initial phases of project
- Improved application performance by **70%** by optimizing ReactJS components and efficient API calls
- Deployed code in a Cloud-hosted environment using Docker Cloud
- Create Express REST API endpoints to feed UI components with PostgreSQL data following MVC architecture
- Employ agile methodologies to manage project development effectively, using tools like Trello
- Manage database handling **1-2 thousand queries** per day, ensuring high availability and reliability
- **Technical Environment**: ReactJS, NodeJS, ExpressJS, PostgreSQL, Docker, GitHub, Trello

Ontario Power Generation | *Data Analyst*   May 2022 – September 2023

- Designed and developed a Power BI dashboard for the nuclear Innage Control Centre manager to analyze vitals on reactor unit operations to ensure plant efficiency is met in the top **1%** of global nuclear plant operations
- 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
- Maintained and cleaned SQL queries for more efficient runtimes, up to **98%** improvement in queries for data retrieval, and managed ETLs
- Oversaw database operations, specializing in the modelling and data architecture design for scalable projects
- **Technical Environment**: MSSQL, Power BI

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
- Extensively designed user interface using Figma for the most user-friendly experience