JOSHUA MAC

Mac.joshua450@gmail.com I (647) 450-2760 I Toronto, Ontario, Canada I Joshuamac.com

TECHNICAL SKILLS

JavaScript, TypeScript Python, React, NodeJS, SQL (PostgreSQL, MySQL), Bootstrap CSS, HTML, VB.NET

EDUCATION

Bachelor of Applied Science, Computer Engineering, Queen's University, Kingston, ON
- **Relevant Courses:** Data Structures, Object Oriented Programming, Fundamentals of Software Development, Computer Vision, Engineering Design and Practice

EXPERIENCE

Software Engineering Intern, Telus   January 2023 – September 2023
- Designed and implemented Oasis, an integrated tool utilizing **ReactJS and VB.NET**, to **streamline project organization, wireline management, and network operations** at Telus. This user-friendly web application automates processes by consolidating tools such as SAP, time sheets, and activity trackers into a single platform, **enhancing efficiency across the organization**.
- Utilized **Google Maps API** to contribute to the development of advanced tools for comprehensive **wireline and network tracking** at Telus. Successfully **deployed on AWS infrastructure**, this tool provides real-time updates on client statuses and wireline information, enhancing operational efficiency

Full-Stack Developer Intern, Mitsubishi   May 2022 – January 2023
- Developed and maintained the company's Component Tracking Tool application using **React as the frontend** to display the graphs and information of each component and **Flask as the backend to connect to the SQL database** as well as built an authentication for specific operators
- Collaborated with software developers, UI/UX designers and operating clients with development related task such as **designing and developing landing pages** for multiple tools, creating a more **responsive frontend** for other applications and fixing bugs/discrepancies within the **Azure pipelines**

PROJECTS

Movie Recommender Application   July 2024 – August 2024
- Developed a full-stack movie recommendation platform using **React**, **Node.JS**, **Express**, and **PostgreSQL**, creating a scalable backend with a well-optimized database schema to handle user data and a responsive front-end with real-time suggestions
- Integrated **The Movie Database (TMDB) API** to create a dynamic recommendation engine with real-time data processing and filtering

Task Manger Application with RESTful API and Authentication   May 2024 – June 2024
- Built a Todo application using **ReactJS libraries and components** to demonstrate proficiency in **front-end web development and JavaScript. Implementing features such as task creation, deletion, and editing, along with task prioritization**
- Utilized **NodeJS** and **PostgreSQL** for a backend, creating endpoints to add and delete task within a database

Traffic Violation Detection with Machine Learning   November 2023 – March 2024
- Developed and deployed a robust machine learning pipeline utilizing **YOLOv5** for speed sign detection and a **ResNet-18 model** for speed zone classification. Integrated the system into real-world camera footage, effectively detecting speed signs and assisting in monitoring and regulating vehicle speeds for enhanced road safety
- Led a team of three students in **collecting and augmenting** a dataset of 8000 speed sign images, implementing **data cleaning and preprocessing** procedures to ensure dataset quality