Muhammad Abdullah

email | linkedin | github | portfolio

Education

BrainStation | Diploma In Software Engineering | Grade: A+ University of Toronto | Bachelor of Applied Science and Engineering (Co-op) Aug 2023 Class of 2023

Technical Skills

Languages: JavaScript, Python, C, SQL (T-SQL), MySQL, HTML/CSS

Frameworks and Tools: React, Node.js, Express.js, Firebase, Knex.js, Saas, Bootstrap, Chakra UI, Git, Heroku, Jira

Work Experience

IHSA | Associate Machine Learning Developer

Sep 2022 - Apr 2023

- Spearheaded the development of a predictive model in Python alongside a team of data scientists, employing an advanced random forest regressor algorithm to conduct an in-depth analysis of accident causality
- Executed feature selection and hyper parameter tuning techniques to maximize the model's predictive accuracy
- Rigorously tested the model's performance on diverse datasets, each comprising over 100,000 data entries, ensuring its adaptability across various scenarios and data distributions (Demo)

York Region School Board | Software Developer Intern

Apr 2022 - Sep 2022

- Redesigned existing ETL jobs to the latest version of SQL Server Integration Services using Microsoft Visual Studio
- Transformed 15+ stored procedures with continuous integration, tailored to client needs and company culture; optimized system performance, resulting in streamlined processes for 1,500 employees
- Orchestrated seamless collaboration within a team of four in agile software development, addressed critical scalability issues, resulting in recognition from the Project Facilitator for exceptional teamwork and project success

Projects

FitBuddy | React, Node.js, Firebase, MySQL



- Built a responsive fitness tracking app that visualizes user's weightlifting progress through interactive charts
- Leveraged Firebase SDk authentication to allow users to log in with pre-existing Google credentials, minimizing the barriers of entry as well as delegating the responsibility of authentication to a trusted, secure API
- Utilised WebPack and Lazy loading that resulted in increase in page reload speed by 60%
- Incorporated Chakra UI for styling UI and ensure faster development time
- Designed deployment strategy on Heroku and Github action to allow CI/CD

InStock | React, Node.js, Figma, MySQL, Jira



- Implemented React-Router to craft a single-page application through client-side rendering, optimizing performance by establishing static routes and minimizing server requests
- Designed and implemented a scalable REST API with CRUD functionality using Express.js to handle HTTP requests for task tracking, ensuring scalability by modularizing code and leaving room for adding more features in future iterations
- Coordinated team using Jira during development, delegating tasks and features to focus teammates on achieving MVP goals

QuickMeals | React, Saas, Axios



- Created a meal suggestion app that takes ingredients as inputs and outputs various potential meals that could be created with those ingredients to help users decide what to make with what they have on hand
- Crafted application's frontend using React, including implementing components for each meal suggestion to ensure a satisfying and interactive user experience with meaningful UI feedback

Google's Hackathon | React, Node.js, Express



- Redesigned a responsive Gmail's App to integrate AI related features in Google's ecosystem
- Iterated on feedback from product manager and UX/UI designers to make application easy to use for customers