Muhammad Abdullah

[Email](#) | [Linkedin](#) | [Github](#) | [Portfolio](#) | [Toronto, ON](#)

Technical Skills

Proficient: JavaScript, Python, HTML, CSS, C/C++, React, Node, Express, GraphQL, Postgres, REST, Firebase
Exposed: TypeScript, React Native, Jest, Prisma, Apollo, SQLAlchemy, Pandas, NumPy, Serverless AWS, EC2, S3
Tools: Git, GitHub, GitLab, Jupyter Notebook, Expo CLI, Expo Go, Jira, Asana, Heroku

Work Experience

Machine Learning Engineer   Sep 2022 - Apr 2023
Infrastructure Health & Safety Association (Contract Position at University of Toronto)   *Toronto, ON*

- 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

Software Developer Intern   Apr 2022 - Sep 2022
York Region District School Board   *Richmond Hill, ON*

- 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

Movie Management API | *TypeScript, GraphQL, Apollo, PostgresSQL, Prisma, JWT, Jest*   🔗

- Created a CRUD API + Search and filter APIs with Apollo graphql and PostgreSQL (Prisma ORM) database
- Engineered a secure user authentication and authorization system, allowing users to register, log in, and receive JWT tokens for authenticated access
- Conducted thorough unit testing of the GraphQL API using Jest to ensure the reliability and correctness of the code

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
- Coordinated team using Jira during development, delegating tasks and features to focus teammates on achieving MVP goals

Education

BrainStation | *Diploma In Software Engineering* | *Grade: A+*   Aug 2023

University of Toronto | *Bachelor of Applied Science in Civil Engineering*   Class of 2023

- Relevant Coursework: Fundamentals of Computer Programming, Data Structures and Analysis, Applied Fundamentals of Artifcial Intelligence, Data Sciene for Civil and Mineral Engineering