IBRAHIM MOHAMED

3801-15 Iceboat Terrace, Toronto, Ontario M5V 4A5

+1 (709)-763-6855 | ibrahim.mdev@gmail.com | $\underline{\text{LinkedIn}}$ | $\underline{\text{GitHub}}$ | $\underline{\text{GitLab}}$ | $\underline{\text{Portfolio}}$

EXPERIENCE

Software Engineer II

Radical Imaging - Full Time

- Engineered a flexible SaaS DICOM viewer using NestJS and NextJS. This cloud-based viewer effortlessly integrates with diverse workflows, maintaining its core functionality while providing adaptability.
- Developed software solutions to tackle challenges in medical imaging projects, primarily focusing on web development, cloud, and AI.
- Addressed and rectified critical security vulnerabilities within the AWS infrastructure, leading to substantial improvements in security and system integrity.
- Integrated AWS Marketplace into our SaaS offerings, resulting in a remarkable 40% surge in customer acquisition.
- Successfully integrated Pager-Duty for real-time outage monitoring, achieving a notable reduction in system downtime and streamlining issue resolution processes.
- Established validation methods for existing clinical tools in the viewer, streamlining the FDA application process and ensuring compliance with regulatory standards.
- Implemented comprehensive automated testing strategies, leveraging frameworks such as Jest, Cypress, and Playwright, which increased code reliability and reduced debugging time by 30%.
- Engineered multiple integrations for our SaaS DICOM viewer, notably with EPIC EHR, NVIDIA's MONAI for AI-enhanced medical imaging, and major cloud services, enhancing interoperability and utility in healthcare.
- Enhanced on-premise deployment and authentication for the OHIF viewer by integrating KeyCloak, oauth-2proxy, and nginx, resulting in a seamless and secure deployment process.
- Core maintainer of Cornerstone3D (https://www.cornerstonejs.org/) and OHIF (https://ohif.org/)

Software Engineer

Jewish General Hospital - Full Time

- Deployed and configured ML models on AWS, using EC2 accelerated compute instances and Sagemaker.
- Prepared ML models for inference using FastAPI, Nginx, and AWS Load Balancer.
- Built a user authentication system using AWS Cognito and FastAPI to verify user JWT tokens.
- Engineered several architectural diagrams and led planning of app development and infrastructure design.
- Programmed a web-based DICOM viewer with extreme performance by utilizing Vue3 and CornerstoneJS's robust accelerated image display and multi-threaded image decoding.

Software Engineer

 $Grafana \ Labs$ - Internship

- Designed and implemented an admin page for managing feature toggles, allowing users to toggle features independently, enhancing user autonomy, and reducing support load.
- Contributed to significantly reducing user reliance on support by facilitating direct visibility into active feature toggles on their Grafana instance.
- Authored comprehensive design documents detailing the new feature's functionality, architecture, and user flow.
- Gained hands-on experience with Golang, integrating backend API endpoints, and utilized React/TS for front-end components, ensuring responsive and dynamic UI/UX.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, HTML, CSS, SQL, C++
Frameworks, Cloud and Databases: Flask, Django, AWS, Azure, GCP ReactJS, NodeJS, VueJS, DynamoDB, REST, Docker, FastAPI, NestJS, NextJS, Cypress, PlayWright, Jest, Percy, Pytorch
Developer Tools: Git, Github, VSCode, PyCharm, Visual Studio, Gitlab, DataGrip

EDUCATION

Memorial University of Newfoundland

Bachelor of Science in Computer Science

Certificates & Awards

St. John's, NL Sep. 2020 - Apr. 2024

July 2024 – Present

Jan 2023 – Present

Jan 2022 – April 2022

April 2022 – June 2023

New York, NY

Montreal, QC

June 2023 – Present Boston, MA