Abubakar **Saad**

Solution Engineer · MLOPs Engineer

31 Rianna crt, Hamilton, ON, Canada, L9B0G3

647-467-8640 | abubakar.saad.891@gmail.com | AbubakarSaad

Summary

An experienced AI/ML and solution engineer with over five years of professional experience designing, developing, and deploying large language models as services. Proficient in Python and experienced in creating reusable packages. Strong background in collaborating with cross-functional teams, optimizing performance, and implementing scalable solutions in cloud environments.

Work Experience

Humansignal

Remote

Senior Support & Solutions Engineer

March 2023 - Present

- Resolved complex technical issues for enterprise customers by deep-diving into their infrastructure, which often involved troubleshooting Ubuntu Linux, Docker, Kubernetes, and networking configurations.
- Acted as a primary point of contact for technical strategy, designing and implementing custom data annotation solutions integrated into customer MLOps pipelines on-premise and in private clouds.
- Developed and contributed bug fixes and enhancements to the open-source Label Studio project, often working with Python and JavaScript, and collaborated with the community via GitHub to get patches accepted upstream.
- Engineered and deployed scalable, secure solutions on customer infrastructure, requiring deep knowledge of Linux system administration, containerization, and distributed systems.
- Provided expert-level support and guidance via multiple channels (GitHub, Slack, Zendesk), demonstrating clear and concise technical communication under pressure.

Laivly

ML/Data Engineer

March 2021 - 2023

- Developed and maintained large-scale ETL and ML pipelines on AWS and Databricks using Python and PySpark, optimizing performance by 50% and reducing processing costs by 50% for a complex, distributed data system.
- Built and deployed large language models as APIs and services into production using Kubernetes, Docker, and modern MLOps practices, ensuring 99% availability for all the clients.
- Extensively worked with and optimized PostgreSQL and other data storage systems to ensure data integrity and query efficiency, directly supporting the data layer for customer-facing applications. This allow product management teams to show clients data direction for products.
- Implemented comprehensive CI/CD pipelines with Jenkins and ArgoCD, incorporating automated testing and quality gates to ensure reliable and frequent deployments.
- Diagnosed and resolved performance bottlenecks across the entire stack, from application code and database queries to infrastructure configuration.

Ecoli-Sense

Machine Learning Developer

Jan. 2019 - May. 2020

- Developed a Twitter sentiment analysis tool, which serves as an assistant for market research, providing valuable insights into public opinion and trends. To ensure efficient data retrieval, optimized the PostgresDB, resulting in significantly faster SQL query execution.
- Constructed a prediction model using Python with the PyTorch framework, designed to predict E. coli concentrations in water samples accurately. This model's predictions are presented within a range of confidence intervals, offering a clear and reliable assessment of potential contamination levels.
- Furthermore, Plotly was chosen for data visualization, a decision that allows for interactive, publication-quality graphs. This tool has enabled the clear and effective presentation of data, facilitating an intuitive understanding of the model's predictions and the underlying sentiment analysis findings.

Education

Brock University

M.Sc in Computer Science

- **Resource Management in Distributed Systems**

Skills

Languages	Python (Proficient), C# (Proficient), HTML (Proficient), CSS (Proficient), Javascript (Proficient), SQL (Proficient), Java (Prior Experience)
UT Framework	Mocha, Chai, Robot, Seleium, JUint, DotNet
Databases	MySQL, PostgreSQL, Mongo, TSQL
Other technologies	PySpark, Kubeflow, DataBricks, Docker, Kubernetes, ArgoCD, Jira, Grafana Labs, Jenkins, Bitbucket, AWS, Terraform, DataDog