

SAUMITRA JOSHI

Software Development Engineer

saumitra1joshi@gmail.com | +91 7042334712 | Bangalore, Karnataka

Linkedin | Portfolio | GitHub | Medium

EDUCATION

SRM Institute of Science & Technology

BTech - Computer Science Engineering with Specialization in Big Data Analytics
CGPA: 9.47

Chennai, Tamil Nadu

June 2018 - May 2022

Amity International School, Gurgaon

Class 12th HSC - (CBSE)
Percentage: 93.2%

Gurgaon, Haryana

March 2017 - March 2018

Amity International School, Gurgaon

Class 10th SSC - (CBSE)
CGPA: 10

Gurgaon, Haryana

March 2015 - March 2016

EXPERIENCE

Brillio | Software Development Engineer | CTO Department

Bengaluru | Jun 2022 - Present

- Part of Chief Technology Officer's Department (R&D). Worked closely with clients and company stakeholders in helping them adapt and expand their footprint in up and coming technologies.
- Delivered and managed scalable enterprise grade solutions, MVPs and POCs for multiple Fortune 1000 clients matching sharp deadlines, business needs and client expectations.
- As part of the HPE (High Performance Engineering) Team, course corrected struggling and backlogged projects facing a plethora of technical blockers.
- Furthered business/technical relations with major cloud providers and represented Brillio in other B2B & B2C interactions.

London Strategy & Consulting Group | Internship

Virtual | Oct 2020 - Feb 2021

- Worked as a Data Science Engineer Consultant Intern and developed machine learning models for SME-Lending Fraud Detection and Credit Card Approvals for non-existent user using SVMs and CNNs.
- Developed the web app for SME-Lending using React.

Think Digital | Committe Member

Chennai | Jan 2020 - Feb 2021

- Worked on software development projects and contributed in organising web development events, using mailchimp to send out emails, setting up forms for registration, and helping other students with their queries regarding web development.

SRM MIC (Machine Intelligence Community) | Committe Member

Chennai | Oct 2018 - Jan 2020

- Worked on various machine learning projects and helped in organizing multiple ML/AI events, mentoring juniors, answering their queries and helping them navigate the ML domain.

SKILLS

Programming Languages:	C, C++, Python, Java, Javascript, Typescript, SQL, HTML, CSS, Powershell
Libraries/Frameworks:	Angular, Spring, LangGraph, Langchain, OpenAI, Terraform, ARM Templates, Azure SDK, Boto3, Nebular, Grafana, PyJWT, Flask, Fast API, Scikit Learn, MatPlolib, TensorFlow, Numpy & Pandas
Tools / Platforms:	Azure, AWS, GCP, Git
Databases:	Oracle, MySQL, Apache Spark SQL, Azure SQL(MSSQL), MongoDB, Azure CosmosDB, Google BigQuery

PROJECTS / OPEN-SOURCE

Brillio | Digital Twin - Supply Chain Management and Simulation Solution

- Worked on multiple solutions using Azure Digital Twins for Supply Chain and Warehouse Management for major multinational cosmetics, tyres and cold storage companies.
- Developed an Angular application integrated with Azure Digital Twins with simulation configuration and application logic, Google Maps overview of supply chain, graphical and card based representation of KPIs.

- Designed and developed a Grafana dashboard for end to end visualisation.

Brillio | CTO Department Azure Account Migration

- Completed Azure Resources Migration for CTO department with reorganization of resources using Azure Devops, ARM Templates, Azure Resource Mover and Terraform.
- Developed Azure Devops Pipeline with powershell scripts using service principals for appropriate permission granting, AzCopy for blob migration using SAS Tokens.
- Configured Azure Devops pipeline using yaml scripts for Azure Function, Static Web App migration.

Brillio | Cloud Financial Operations Solution

- Led the development of real-time cost monitoring and inventory management and provisioning APIs (Boto3 & Azure SDK) for cloud infrastructure across multiple accounts and hyperscalers, for an in-house FinOps Solution.
- Developed CRON jobs in AWS utilizing Lambda, CloudWatch Alarm, SSM Agent, EC2 and in Azure using Azure Functions, Azure Virtual Machine for billing reports retrieval from Cost Management APIs and storage in Azure SQL Server for low latency user access.
- Set up a microservices based architecture using flask for resilience, scalability and flexibility.
- Engineered the login flow, implementing JWT token for authentication.
- Established Azure SQL integration with a Flask Server Backend, developed Python scripts, and SQL queries to enable CRUD operations on the SQL Server.
- Implemented dynamic multi-threading in a program to optimize API calls, achieving a 90% reduction in response times and an 80% decrease in Virtual Machine CRON Job costs.

Brillio | Financial Planning & Analysis Gen AI Tool

- Collaborated closely with the FPA (Financial Planning & Analysis) department to understand pain points, automation requirements and reduced insight generation time by 70% and enabled non-technical CXX's to get real time insights on company's logistics and financial data.
- Developed a GPT-4o powered chatbot powered by a multi-agent architecture using Langgraph & Langchain that automates SQL queries, report generations and visualizations on the company's financial databases and generates real-time event stream outputs based on user queries.
- Designed and developed the UI/UX using Angular (Nebular Framework). Hosted the interface on Azure Static Web Apps and configured an Azure Devops Pipeline for CI/CD.
- Utilised FAISS, ChromaDB, Pinecone vectored databases, Langchain Agents and Tools to form optimal architecture for creating SQL queries, interpreting/formatting SQL responses and creating visualizations.
- Deployed the entire Fast API server on Azure Function, reducing OpEx by 70% by eliminating the need for Azure App Service. Configured a feedback and analytics JSON dump mechanism to Azure Blob Storage.

Identifying Misleading Investment Claims | GFF 2023 SEBI Hackathon

- An end-to-end solution where the application interface is hosted on cloud instances and the backend leverages serverless architecture for optimized and scalable request handling. Users provide YouTube video or YouTube Shorts links.
- Post-processing, the claims asserted by YouTubers are cross-referenced with the Vectorized DB containing SEBI's comprehensive guidelines and documents from their website
- Implemented a user-friendly interface allowing input of video links to receive transparent insights and quoted sections

CERTIFICATIONS

- | | |
|---|--|
| • Google Associate Software Developer (ACE) | • AWS Cloud Practitioner |
| • Microsoft Certified: Azure Fundamentals(AZ-900) | • NPTEL Practical Machine Learning with TensorFlow |

HONORS & AWARDS

- 2nd Position in Microsoft Gen AI Hackathon || Hack2Skill || TheProductFolks
- Top 5 Finalist - SEBI National Hackathon || Hack2Skill || TheProductFolks
- Brilliant Of the Quarter, Brilliant of the Month, Group Excellence Award By Brillio
- Guest Speaker at NIT Trichy || Azure Digital Twins and AWS IOT Twin Maker || Pragyan Festival