RAHUL DATTA

Full Stack Software Engineer (with Data Science Expertise)

in linkedin.com/in/rahul2008d

github.com/rahul2008d

+447765084554 @ rahul2008d@gmail.com

💡 31 Wood street, Swindon, SN1 4AN, UK i Indian citizen holding Spouse Work Visa in UK (DOB: 01 May, 1988)



Accomplished Full-Stack Software Engineer with 14+ years of diverse experience in software engineering, web development, and cloud-based solutions. Proficient in modern web frameworks such as React.js, Next.js, and backend development using Python and Node.js. Adept at designing scalable, dynamic, and SEO-optimized web applications, complemented by expertise in DevOps, CI/CD pipelines, and cloud platforms. Skilled in leveraging advanced machine learning, deep learning, and Gen AI including Retrieval Augmented Generation to deliver data-centric, innovative solutions. Actively seeking a Full-Stack Developer role to contribute technical leadership and creativity in building transformative digital solutions.

SKILLS

Frontend: React.js, Next.js, JavaScript, HTML, CSS, Tailwind CSS, Redux, and React Query for building

dynamic and SEO-optimized web applications

Backend: Python, Node.js (TypeScript), Redis, Kafka, BullMQ, SQS, WebSockets, event-driven architec-

tures, RESTful APIs, GraphQL, SAP ABAP on HANA, SAP BTP

DevOps (CI-CD) & Cloud: Docker, Kubernetes, Jenkins, GitHub Actions, Linux, AWS

> VS Code, Jupyter Lab Tools:

Databases / Data warehouse: MySQL, PostgreSQL, Snowflake, BigQuery

> ML & AI: Machine Learning, Deep Learning, NLP, Computer Vision, Reinforcement Learning, Feature En-

> > gineering, Anomaly Detection, Transformers, LLM Integration, Generative AI

Analysis & Visualization: SOL, Matplotlib, Seaborn, Plotly, Pandas Packages & Frameworks: Django, Flask, FastAPI, Scipy, Statsmodels



PROFESSIONAL EXPERIENCE

November 2021 Present

Product Lead in SAP and Machine Learning, LAM RESEARCH, India

- > Developed full-stack LLM-Powered Chatbot for Semiconductor Supply Chain Management: Architected and implemented a full-stack LLM-powered chatbot for semiconductor supply chain management, utilizing React. js for dynamic user interfaces and Python (FastAPI) for backend services. Integrated Retrieval-Augmented Generation (RAG) and Reasoning and Action (ReAct) frameworks, enabling real-time search engine interaction.
- > Scalable APIs for ML Integration and Business Efficiency: Developed scalable APIs for seamless integration between machine learning models and business applications, enhancing operational decision-making capabilities and achieving a 20% reduction in equipment failures.

Python Express/Node.js ReAct.js Docker Redis RabbitMQ Machine Learning Deep Learning Gen Al LLM RAG Langchain SQL NoSQL

June 2020

Solutions Architect, IBM, India

November 2021

> Led the CANADA SAAQ S4 HANA Implementation as Techno-functional Consultant: Developed and managed SAP Fiori elements in SAP BTP, driving digital transformation for IBM Cloud. Implemented the ABAP RESTful Programming Model, leading development and deployment of custom Fiori apps using OData services and CDS for ABAP 7.5

SQL ABAP HANA Sap SD Sap MM

October 2014 June 2020

Tech Lead, ACCENTURE, UK & India

- > Redesigned UK Post Office Payroll System: Led ABAP S/4HANA payroll revamp for UK Post Office in six months during a 10-month London assignment
- > Led S/4HANA Implementation for Petronas Italy: Techno-Functional lead in SAP ABAP and Materials Management (MM), ensuring smooth go-live and effective issue resolution. Demonstrated strong leadership and problem-solving skills in a high- stakes environment
- > Led S/4HANA Projects with International Expertise: Managed 3 end-to-end migrations and 4 greenfield implementations as a solutions architect and lead developer across Europe

SQL S/4HANA Migrations Greenfield Implementations

March 2011 September 2014

Systems Engineer, TATA CONSULTANCY SERVICES, India

> Contributed to Major SAP Projects: Key contributor to two SAP greenfield implementations; awarded Best Member. Upgraded NetWeaver 7.3 and enhanced Webdynpro for ABB Norway's LSO Portal, developing nine custom components and managing FPM configuration end-to-end

System Upgrades | Custom Web Applications



EDUCATION

August 2006 -Bachelor of Technology, Information Technology, West Bengal University of Technology, India, March 2010 DGPA: 8.12/10

February 2022

Online Post Graduate Program in Artificial Intelligence (AI) & Machine Learning (ML), PURDUE UNIVERSITY, USA, GPA: A++

March 2023

> Course Modules: Python, SQL, Power BI, Excel, Product Analytics, Probability & Statistics, Machine Learning, Neural Network, Deep Learning, Text Analytics, MLOps, NLP, Computer Vision

CNN | LSTM | Data Augmentation | Azure | OOPS | Functional Programming | Hypothesis Testing | A/B testing | Projects |



CERTIFICATIONS

- 1. Google Cloud Big Data and Machine Learning Fundamentals, Google
- 2. Machine Learning Engineering for Production (MLOps) Specialization, Google
- 3. PyTorch for Deep Learning in 2023: Zero to Mastery, Udemy
- 4. Python for Data Science, Harvard University
- 5. Natural Language Processing: Deeplearning.ai

📂 BUSINESS CASE STUDIES/ PROJECTS :

- 1. Face Detection and Emotion Recognition with TensorFlow: Implemented face detection and emotion recognition using neural networks in TensorFlow for the Capstone project
- 2. Kidney Stone Prediction: Binary classification using a tabular dataset
- 3. Enzyme Substrate Classification: Multi-label classification with biochemical data
- 4. Crab Age Prediction: Regression analysis on a biological dataset
- 5. Vector Borne Disease Classification: Classification task with epidemiological data
- 6. Machine Failure Prediction: Binary classification for predicting machine failures
- 7. Pulsar Detection: Binary classification with astronomical data
- 8. Media Campaign Cost Prediction: Regression on marketing campaign data
- 9. Software Defects Prediction: Binary classification using software metrics
- 10. CO2 Emissions Prediction: Predicting emissions for Rwanda using regression



Awards & Scholarships

- 1. Received the Best Member of the ABB account award at TCS in both 2012 and 2013
- 2. Received the Accenture Celebrates Excellence (ACE) award in the UK in 2018 for successfully redesigning the UK Post Office payroll engine within six months during a 10-month onsite assignment in London with Accenture

COMPETENCE

- > Project management: Successfully managed and delivered multiple ML and SAP projects simultaneously, consistently meeting deadlines and achieving objectives
- > Communication: Excellent verbal communication, presentation, and writing skills, effectively conveying complex technical concepts to diverse audiences
- > Additional Skills: : Innovative and driven with a strong analytical mindset; adept at both independent work and collaborative team environments

REFERENCES

Available upon request