Shantanu Raghuwanshi

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PROFESSIONAL SUMMARY

Results-driven Associate Architect with 6+ years of experience designing **end-to-end GenAI** and **ML** solutions on **cloud platforms (Azure/AWS)**. Proven expertise in building **secure**, **scalable systems** from conception to deployment. Adept at leading cross-functional teams to deliver AI-driven business outcomes. Strong background in **cloud architecture**, **MLOps**, **and optimizing foundation models**.

SKILLS

- Cloud Platforms: AWS (EC2, S3, Lambda, IAM), Azure (Databricks, Document Intelligence), Cloud Architecture
- AI/ML: Generative AI, LLMs (GPT-4, Llama-2), Fine-tuning, Agentic AI, SageMaker/Bedrock (familiar), PyTorch, MLflow
- MLOps: CI/CD Pipelines, Model Monitoring, Drift Detection, Automated Retraining
- Data Engineering: Apache Spark, Databricks, Snowflake, Neo4j, Big Data Processing
- Security: Data Encryption, Compliance Standards (HIPAA/GDPR implementation)
- **Programming**: Python, SQL, Java, Terraform (IaC)
- Leadership: Technical Advisory, Cross-functional Team Management, Client Stakeholder Collaboration

PROJECT EXPERIENCE

Fraud Platform for Payments Processing

ValueLabs, Hyderabad February 2024 – Present

Technologies: Python, SQL, Azure, DataBricks, PySpark, Mlflow, Copilot studio

- **Designed and deployed** secure AI fraud detection system handling 100K+ transactions/day on Azure (transferable to AWS architecture)
- Implemented MLOps pipeline with automated drift detection (CI/CD via MLflow) reducing fraud by 35%
- Architected cloud-native solution using PySpark/Databricks (parallel: AWS Glue + SageMaker)

Tax Management System

ValueLabs, Hyderabad September 2023 – February 2024 Technologies: Python, SQL, Azure, FastAPI, GPT-4, Document Intelligence

- Built end-to-end tax document processing system with GPT-4 and Azure Document Intelligence.
- **Designed scalable architecture** supporting 10K+ ops/day (99.9% uptime) with automated NER/LLM summarization.

Conversational AI Chatbot for Insurance Brokers

ValueLabs, Hyderabad June 2023 - September 2023

Technologies: LLM, Python, Django, MS Teams (GraphAPI)

- Developed an agentic AI chatbot that improved broker productivity by 20%, providing instant access to business domain-specific insights with connections to multiple APIs and Teams integration.
- Integrated advanced natural language processing, achieving 95% accuracy in query resolution.

Conversational AI Chatbot for Health Advisory

ValueLabs, Hyderabad June 2023 - September 2023

Technologies: LLM (LLAMA-2 70B), Neo4j, Python, FastAPI

- Developed Llama-2 70B based Agentic AI for healthcare interactions, reducing consultation time by 30%.
- Engineered knowledge graph (Neo4j) for medical relationship mapping, ensuring data privacy compliance(HIPAA-compliant data handling).
- Acted as technical advisor to clients on GenAI implementation strategies.
- Mentored junior engineers in MLOps best practices.
- Evaluated model alternatives (e.g., SLMs vs LLMs) for cost-performance optimization.

Customer Retention Model

ValueLabs, Kuala Lumpur May 2022 - May 2023

Technologies: OpenAI GPT-3, Python, SQL, Snowflake

- Built a customer segmentation model that improved retention rates by 25%, contributing to a 15% increase in annual revenue.
- Enabled personalized marketing campaigns by analyzing customer behaviors and preferences.

Marketing Mix Model

ValueLabs, Kuala Lumpur September 2021 - April 2022

Technologies: Dash, Spark-ML, Python

- Delivered a regression-based budget optimization model, increasing marketing ROI by 20%.
- Provided actionable insights into reallocating budgets across 5 major channels.

Social Media Sentiment Analysis

ValueLabs, Kuala Lumpur April 2021 - September 2021

Technologies: OpenAI GPT-3, ML

- Conducted sentiment analysis of over 1M social media posts, enhancing product positioning by 15%.
- Identified key competitors' weaknesses, enabling strategic pivots in marketing campaigns.

Automation Framework for Operational Efficiency

ValueLabs, Kuala Lumpur October 2019 - March 2021

Technologies: Python, Java, SQL, Linux, Bash

- Designed an automation framework saving 30+ person-hours weekly, streamlining daily operations.
- Reduced error rates in operational tasks by 40% through automated monitoring and reporting.

Backend API Development for Banking Client

ValueLabs, Hyderabad January 2019 - September 2019

Technologies: Java, SQL, Spring Boot

- Developed secure APIs that enhanced digital banking services for over 1M users.
- Ensured seamless integration with third-party systems, achieving 99.8% reliability.

EDUCATION

Shri Ramdeobaba College of Engineering and Management, Nagpur

B.E. - Computer Science and Engineering

August 2015 - May 2019

CGPA: 7.9/10