

SHIVAM PAL

(623) 866-4551 ◇ Scottsdale, AZ

shivampal.dev1@gmail.com ◇ linkedin ◇ website

EXPERIENCE

American Express
Software Development Engineer

Phoenix, AZ, USA
09/2024 - Present

- Managed ML-serving automation and messaging frameworks, ensuring seamless MLOps integration.
- Created an API for distributed merchant offers system, resolving data-recall anomalies and boosting data efficiency by 43%.
- Revamped LPM batch processing for AWS S3 transfers, increasing pipeline performance by 31%.
- Migrated OpenTelemetry logs from Splunk to ELF and built Splunk/Kibana visualizations, improving monitoring by 27%.
- Automated data encoding and E2E testing, increasing server uptime by 28% and reducing operational costs by \$600K

Arizona State University with Integrated Travel
Team Lead, Machine Learning Analytics

Tempe, AZ, USA
07/2024 - 09/2024

- Directed an ML-driven Net-Zero transit project using SQL and R, improving predictive analytics by 19%.
- Supervised multi-source ETL pipelines, improving data accuracy by 21% and consolidating unstructured data for ML model training.
- Streamlined end-to-end ML-pipelines with Airflow, Redshift & MLflow, integrating CI/CD to cut training time by 15%.

Adani Edu. with MCMIT
Device Usability Researcher

CG, India
01/2022 - 07/2022

- Engineered an IoT platform with Node.js and WordPress, increasing user engagement by 23% through UX-driven analytics.
- Implemented Agile workflows to streamline project development, reducing timelines by 32% while assisting in classroom sessions.
- Leveraged Identity Management(Crossplane), Google Cloud Analytics, improving feedback participation by 25%.

Cognizant
Programmer Analyst

TN, India
01/2021 - 12/2021

- Optimized financial data pipelines with Kafka and Spark, achieving a 12% reduction in processing latency.
- Enhanced Azure cloud scalability, leading to an 18% improvement in micro-service deployment efficiency with Kubernetes.
- Spearheaded a cross-functional team in a Healthcare Insurer Project, enhancing Medicare data processing by 20% with Spring Boot.
- Executed a testing framework with Selenium & Spring Boot, improving code reliability and efficiency by 33%.

SKILLS

Development Tools Python, Java, SQL, Shell, C++, JavaScript, Scala, PHP, R, React, Angular, Django, Flask, Spring, Node.js, Go.

Data & Cloud CI/CD, Git, Azure, Docker, Kibana, Terraform, Jenkins, Postman, BigQuery, Databricks, Hadoop, Tensor, Keras, GraphQL.

Certifications CompTIA 2024 Security+, AWS 2024 Solutions Architect Associate, Oracle 2023 FA, IBM DSP.

PROJECTS

Rayz: AI-Powered X-ray Analysis

11/2024 - 02/2025

- Designed an AI-powered medical assistant using deep learning models, achieving 93.44% AUROC on NIH & NLM CXR datasets.
- Optimized inference with CUDA, NumPy, XLA, & multithreading, cutting inference time and boosting GPU efficiency by 41%.
- Deployed BERT-based SLM/SML for label extraction, fine-tuning with Optuna & Torch-TensorRT to enhance annotation accuracy.

Sustaining Balance, ASU

01/2024 - 05/2024

- Conducted a global food security analysis on 53k data points using AWS, GIS, and BI tools, uncovering insights on resource allocation.
- Built an NLP pipeline with HF Transformers, using FastAPI & AWS Lambda, improving sentiment interpolation by 44%.

Tryspec: Virtual Try-On System

08/2023 - 11/2023

- Developed an AR-based virtual try-on system using OpenCV and MediaPipe, enabling real-time accessory visualization.
- Integrated adaptive facial landmark detection and sizing for interactive product toggling and boosting engagement by 10%.

EDUCATION

M.S., Information Technology (Project Management)

08/2022 - 05/2024

Ira A. Fulton Schools of Engineering, Arizona State University, AZ, USA

GPA: 4.00

Relevant Coursework: Info. Systems Development, Big Data Analysis, ML/DL, Cloud & Computer Architecture, IoT