

# SHIVAM PAL

(332) 733-8760 ◇ Scottsdale, AZ

ershivampal11@gmail.com ◇ linkedin ◇ website

## EXPERIENCE

<b>American Express</b> <b>Software Development Engineer</b>	Phoenix, AZ, USA 09/2024 - Present
<ul style="list-style-type: none"><li>• Crafted a new API to resolve data-recall mismatches, improving data streamlining by 43%.</li><li>• Worked on LPM Modernization, implementing batch processing for data transfer to S3, enhancing pipeline performance by 31%.</li><li>• Designed infrastructure transfer across cloud systems, improving deployment and supporting multiple DevOps frameworks.</li><li>• Migrated OpenTelemetry logs from Splunk to ELF and designed visualizations, enhancing monitoring efficiency by 27%.</li><li>• Automated data encoding, E2E testing boosting server uptime by 28% and cutting operational costs by \$600K.</li></ul>	
<b>Arizona State University with Integrated Travel</b> <b>Team Lead, Machine Learning Analytics</b>	Tempe, AZ, USA 07/2024 - 09/2024
<ul style="list-style-type: none"><li>• Piloted ML-driven Net-Zero transit project using SQL and R, achieving a 19% increase in efficacy through predictive analytics.</li><li>• Supervised multi-source ETL pipelines, improving data accuracy by 22% and consolidating unstructured data for ML model training.</li><li>• Built a scalable data warehouse on Redshift, optimizing large dataset storage and cutting operational costs by 15%.</li></ul>	
<b>Adani Edu. with MCMIT</b> <b>Device Usability Researcher</b>	CG, India 01/2022 - 07/2022
<ul style="list-style-type: none"><li>• Led development on an IoT platform with Node.js, improving engagement by 23% through analytics, UX, and WordPress integration.</li><li>• Instilled Agile processes across teams, cutting project delivery timelines by 32% and increasing project agility.</li><li>• Implemented Google Cloud Platform (GCP) analytics, raising participant feedback rates by 25% to refine and enhance usability.</li></ul>	
<b>Cognizant</b> <b>Programmer Analyst</b>	TN, India 01/2021 - 12/2021
<ul style="list-style-type: none"><li>• Optimized financial data pipelines with Kafka and Spark, achieving a 12% reduction in processing latency.</li><li>• Enhanced Azure cloud scalability, leading to an 18% improvement in deployment efficiency with Kubernetes.</li><li>• Spearheaded a cross-functional team in a Healthcare Insurer Project, enhancing Medicare data processing by 20% with Spring Boot.</li><li>• Orchestrated a robust testing framework with Selenium &amp; Spring Boot, improving code reliability and operational efficiency by 32%.</li></ul>	

## SKILLS

<b>Development Tools</b>	Python, Java, SQL, Shell, C++, JavaScript, Scala, PHP, R, React, Angular, Django, Flask, Spring, Node.js, Go.
<b>Data &amp; Cloud</b>	CI/CD, Git, AWS, GCP, Azure, Splunk, ELF, MongoDB, Docker, Kubernetes, Kibana, Terraform, Jenkins, Postman, BigQuery, Databricks, Hadoop, Spark, Tensor, Keras, Pandas, NumPy, Tableau, Power BI, Graph QL.
<b>Certifications</b>	CompTIA 2024 Security+, AWS 2024 Solutions Architect Associate, Oracle 2023 FA, IBM DSP.

## PROJECTS

<b>Rayz: AI-Powered X-ray Analysis</b>	11/2024 - 02/2025
<ul style="list-style-type: none"><li>• Developed a RAG-based AI assistant using EfficientNet-B0 and SLM, achieving 93.44% AUROC on NIH &amp; NLMCXR datasets.</li><li>• Engineered a hybrid optimization pipeline with CUDA, vectorized NumPy, and XLA, cutting inference time by 40%.</li><li>• Devised an adaptive multithreading system for CPU-GPU load balancing, improving efficiency by 15%.</li><li>• Deployed NLP-based label extraction, enhancing dataset annotations for better classification accuracy.</li></ul>	
<b>Tryspec: Virtual Try-On System</b>	08/2023 - 11/2023
<ul style="list-style-type: none"><li>• Created an AR-based virtual try-on system using OpenCV and MediaPipe, enabling real-time accessory visualization.</li><li>• Integrated dynamic facial landmark detection and adaptive sizing to personalize accessory fitting.</li><li>• Administered interactive product toggling, allowing users to explore styles instantly, increasing engagement by 10%.</li></ul>	

## EDUCATION

<b>M.S., Information Technology (Project Management)</b>	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	
<b>B.Tech., Electronics and Communication Engineering</b>	08/2017 - 05/2021
SRM Institute of Science and Technology, TN, India	GPA: 3.02
Relevant Coursework: C Programming, Virtual Reality, VLSI Design, Network Protocols, Cryptography	