

SHIVAM PAL

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EXPERIENCE

American Express Software Development Engineer	Phoenix, AZ, USA 09/2024 - Present
<ul style="list-style-type: none">• Crafted an API using Java & Spring Boot, resolving One data SE data-recall and improving real-time data efficiency by 43%.• Used AWS Lambda & Step Functions to automate data ingestion and optimize S3 batch processing, boosting performance by 31%.• Migrated OpenTelemetry logs from Splunk to ELF, integrating Kibana for improved monitoring and faster debugging by 27%.• Automated data encoding, E2E testing boosting server uptime by 28% and cutting operational costs by \$600K.• Managed one-click deployment of 30+ brokers by automating PG-Admin setup via cloud-init on VM, streamlining MLOps integration.	
Arizona State University with Integrated Travel Team Lead Analytics	Tempe, AZ, USA 07/2024 - 09/2024
<ul style="list-style-type: none">• 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 22% and consolidating unstructured data for ML model training.• Streamlined end-to-end ML-pipelines(MLOps) on Redshift & Airflow, reducing model training time by 15%.	
Adani Edu. with MCMIT Device Usability Researcher	CG, India 01/2022 - 07/2022
<ul style="list-style-type: none">• 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, Google Cloud Analytics, improving feedback participation by 25%.	
Cognizant Programmer Analyst	TN, India 01/2021 - 12/2021
<ul style="list-style-type: none">• 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 deployment efficiency with Kubernetes.• Spearheaded a cross-functional team in a Healthcare Insurer Project, enhancing Medicare data processing by 20% with Spring Boot.• Orchestrated an automated test framework using Spring, Selenium & TestNG, reducing regression testing time by 32%.	

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, AWS, GCP, Azure, Splunk, ELF, MongoDB, Docker, Kubernetes, Kibana, Terraform, Jenkins, Redis, Postman, BigQuery, Databricks, Hadoop, Spark, Tensor, Keras, Pandas, NumPy, Tableau, Power BI, Graph QL.
Certifications	CompTIA 2024 Security+, AWS 2024 Solutions Architect Associate, Oracle 2023 FA, IBM DSP.

PROJECTS

Opticomp	07/2024 - 09/2024
<ul style="list-style-type: none">• Devised a high-performance optimizer using CUDA & parallel computing, enhancing deep learning inference speed by 26%.• Designed real-time usage displays with Matplotlib and Tkinter, visualizing top 15 processes, reducing bottlenecks by 30%.• Deployed XGBoost-based ML algorithms for smart app removal, improving efficiency and reducing usage by 13%.	
Tryspec: Virtual Try-On System	08/2023 - 11/2023
<ul style="list-style-type: none">• Created an interactive AR-based virtual try-on system with OpenCV & TensorFlow, implementing real-time facial landmark detection.• Integrated adaptive facial landmark detection and adaptive sizing to personalize accessory fitting.• Administered interactive product toggling, allowing users to explore styles instantly, increasing engagement by 10%.	

EDUCATION

M.S., Information Technology (Project Management), Ira A. Fulton Schools of Engineering, Arizona State University, AZ,USA Relevant Coursework: Info. System Development, Analyzing Big Data, ML/DL, Cloud & Computer Arch., and IoT.	08/2022 - 05/2024 GPA: 4.00
B.Tech., Electronics and Communication Engineering, SRM Institute of Science and Technology, TN, India Relevant Coursework: Programming in C, Virtual Reality, VLSI Design, Network Protocols, Cryptography.	08/2017 - 05/2021 GPA: 3.02