

Varun Shelke

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EDUCATION

University of Pittsburgh <i>Master of Science in Information Science GPA: 3.9</i>	Pittsburgh, PA Aug. 2024 – Apr 2026
University of Pune <i>Bachelor of Engineering in Computer Engineering</i>	Pune, India Aug. 2016 – Jul 2020

EXPERIENCE

AI Engineer <i>Pitt AWS Cloud Innovation Center</i>	May 2025 – Present Pittsburgh, PA
<ul style="list-style-type: none">Engineered GenAI automation pipeline using S3, AWS Bedrock OCR + LLM that eliminated 10 hours/week of manual data entry for production sports analytics platform, processing 20+ daily practice score images with human-in-the-loop validation.Built scalable SMS campaign system handling 100K+ messages via S3, Lambda, SNS/SQS, and Amazon Bedrock, automating 67% of customer interactions through LLM intent detection before routing high-value leads to human agents.Developed semantic search analytics tool on vector embeddings with Pydantic tool calling enabling natural language queries across 1M+ survey rows, extracting insights from unstructured feedback.Automated infrastructure deployment for 3 production prototypes using AWS CDK and CI/CD pipelines with security scanning, linting, and GitOps workflows for serverless GenAI applications.	
Engineer <i>Nagarro</i>	May 2022 – Aug. 2024 Pune, India
<ul style="list-style-type: none">Led 3-engineer team implementing Order Management System using Spring Boot and SAP Commerce, reducing order cancellations by 85% and increasing inventory accessibility by 10x across 62 fulfillment centers.Designed dynamic fulfillment routing engine in Java that evaluated warehouse inventory, lead times, and product location across 62 centers to prevent overselling, processing 2K-5K orders a day during peak periods.Built automated order reliability infrastructure with CronJobs and retry mechanisms for failed orders and shipping, reducing manual intervention across 62 locations.	
Programmer Analyst <i>Cognizant Consulting</i>	Nov. 2020 – May 2022 Pune, India
<ul style="list-style-type: none">Delivered 20+ features across Fortune 500 e-commerce platforms Java/Spring Boot and SAP Commerce Cloud, including automated product import workflows and real-time inventory integrations with SAP ECC.Increased unit test coverage from 72% to 89% by implementing comprehensive JUnit/Mockito test suites and resolving SonarQube code quality issues, improving codebase maintainability for 15-engineer team.Engineered bi-directional integration between e-commerce systems and Salesforce CRM ensuring accurate order and customer data synchronization across enterprise platforms.	

ACCOMPLISHMENTS & LEADERSHIP

- Built [diving analytics platform](#) deployed by **Pitt Diving** and garnered interest from **USA Diving** team
- 1st place at [KPMG Cup Showcase](#) for strategic analysis projecting **\$50M** value creation for PPG Industries
- Mentored **2 interns** at AWS Cloud Innovation Center, guiding development of production GenAI applications
- Received **Engineering Excellence** award at Nagarro for outstanding technical contributions and project delivery

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, Typescript, SQL, GraphQL, MySQL

Frameworks: Spring Boot, FastAPI, Node.js, React.js, SAP Commerce Cloud, Fluent Commerce

Cloud & Tools: AWS (CDK, Lambda, S3, Bedrock, SNS, SQS, DynamoDB, End User Messaging), Pydantic, LangChain, LangGraph, Redis, Docker, Kubernetes, Terraform, Git, Jira, Postman, Claude Code, Kiro CLI.