

Nileet Savale

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Education

Indiana University

M.S. in Computer Science, Bloomington, IN

Aug 2024 - Jul 2026

GPA: 3.83/4

Savitribai Phule Pune University

B.E. in Computer Science, Pune, Maharashtra, India

Jul 2020 - Jul 2024

CGPA: 8.9/10

Experience

Forward Deployment Engineer

Aug 2025 - Aug 2026

Global Health Impact (GHI), Tobias Center, Indiana University Bloomington, IN

- Slashed deployment time by **75%** by designing and maintaining **CI/CD pipelines** with Jenkins, Docker, and Nginx, eliminating manual release processes and standardizing deployments across multiple production environments and development teams.
- Administered cloud-hosted services supporting **99.9% uptime**, implementing monitoring, incident response workflows, deployment safeguards, and proactive health checks to improve production reliability and operational resilience.
- Migrated legacy Flask applications to **Next.js**, modernizing the frontend architecture and improving maintainability.
- Engineered **RESTful APIs** and scalable data ingestion pipelines for healthcare analytics workflows, reducing entity-matching errors by **30%** while improving downstream data quality, reporting accuracy, and data processing efficiency.

Research Assistant - Data Analytics & Machine Learning

Jan 2026 - June 2026

Indiana University School of Public Health Bloomington, IN

- Reduced data preprocessing time by **60%** by engineering SQL-based ingestion pipelines for NHANES datasets spanning **180K+ records** across **9 survey cycles**, automating data cleaning, validation, and transformation workflows.
- Developed regression and classification pipelines using statistical learning techniques to analyze relationships between nutritional biomarkers and cardiovascular outcomes across large population-scale health datasets derived from CDC sources.
- Integrated CDC and NIH datasets through automated validation pipelines, improving data quality and reproducibility for research.

Software Engineering Intern

Nov 2023 - Apr 2024

Wipro PARI Ltd Pune, Maharashtra, India

- Improved industrial automation validation efficiency by **15%** through FAT3 testing, process optimization, and structured validation procedures across **3** large-scale automation deployments supporting manufacturing operations.
- Increased system validation accuracy by **20%** by developing standardized testing workflows, defect tracking procedures, deployment readiness checks, and integration validation processes across engineering teams.
- Collaborated across multiple teams to troubleshoot integration issues and ensure production readiness of automation platforms.

Machine Learning Engineer Intern

Jan 2023 - Jun 2023

SearchIn Maharashtra, India

- Developed computer vision models for smart retail checkout systems, training item-recognition pipelines to identify products placed into camera-enabled shopping carts in real time and support automated checkout workflows.
- Built barcode detection and image-processing workflows using machine learning and computer vision techniques, improving product identification accuracy, reducing manual checkout interactions, and enhancing customer experience.
- Integrated ML inference pipelines into retail systems, enabling automated item tracking, inventory recognition, and checkout.

Software Engineering Intern

Jan 2022 - Apr 2022

Atul Ltd Gujarat, India

- Built an enterprise administration platform serving **75+ facilities** and **5,000+ employees**, streamlining administrative operations.
- Built backend services and real-time data synchronization pipelines, reducing information retrieval latency by **40%** across systems.
- Collaborated with cross-functional stakeholders to deliver scalable software solutions supporting large-scale industrial systems.

Stamp'd - Founder & CTO, Travel Readiness Platform

Amplify Co-hort - Summer 2026

- Engineered a scalable backend platform using FastAPI and AWS services, achieving sub-200ms API latency for real-time travel readiness, visa validation, and immigration workflow automation across international travel scenarios.
- Architected cloud infrastructure using AWS EC2, S3, RDS, DynamoDB, and Cognito with Terraform Infrastructure-as-Code, enabling reproducible deployments, secure multi-service integration, and simplified infrastructure management.
- Built CI/CD pipelines with Docker and GitHub Actions supporting zero-downtime deployments, automated infrastructure provisioning, streamlined release management, and reliable production rollouts.

Projects

LangViz - Language-Agnostic Visualization Tool

React.js, Node.js, Docker, PostgreSQL, Python, LLM

- Built a secure analytics platform executing Python and R workloads inside isolated Docker containers, supporting **10+ visualization types** with live rendering, interactive previews, and sandboxed execution.
- Designed backend services and PostgreSQL-backed session management enabling reproducible analytics workflows, AI-assisted chart generation, persistent analysis history, and collaborative data exploration.

Suits - AI Workplace Conflict Resolution

Claude API, FastAPI, Next.js, PostgreSQL, Docker

- Reduced HR triage time by **40%** by building a multi-party AI mediation platform using Claude API to assess dispute severity, summarize perspectives, and generate structured resolution workflows for workplace conflicts.
- Optimized case routing through a deterministic policy engine classifying disputes into **3 severity tiers**, automatically escalating high-risk cases while routing lower-severity conflicts through guided AI mediation workflows.

Technical Skills

Languages:

Python, C/C++, Java, JavaScript, TypeScript, SQL

Frameworks:

FastAPI, Next.js, React.js, React Native, Node.js, Express.js

Cloud & DevOps:

AWS (EC2, S3, RDS, DynamoDB), Docker, Kubernetes, Terraform, Jenkins, GitHub Actions, Git

Databases:

PostgreSQL, MongoDB, DynamoDB, Firebase

ML / AI:

PyTorch, TensorFlow, Scikit-learn, Pandas, NumPy, NLP, OpenAI APIs, LLMs

Systems:

Linux, Distributed Systems, REST APIs, Microservices, OOP, Agile/Scrum, Statistics, vLLM

Publication:

Transforming Household Waste Management: IoT-Enabled Smart Dustbin

IEEE, Oct 2024

Certification:

AWS Certified AI Practitioner (AIF-C01)

Nov 2025 - Nov 2028