

SANJANA ONTERU

Forward Deployed AI Engineer | Agent Systems and Customer Delivery

Dallas, TX | Open to relocation to New York City or San Francisco
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Forward Deployed AI Engineer translating enterprise requirements into agent architectures, integration plans, and production workflows. Builds across banking, healthcare, and pharmaceuticals, combining Python engineering with customer delivery, systematic debugging, and reusable technical documentation. Experience spans conversational AI, multi-agent migrations, model evaluation, and machine learning systems operating at scale.

TECHNICAL SKILLS

AI systems: Agent orchestration, conversational AI, RAG, MCP, evaluation, guardrails, voice and IVR

Engineering: Python, SQL, APIs, Git, Docker, Kubernetes, Terraform, CI/CD, AWS, GCP, Azure

Delivery: Technical scoping, customer delivery, systematic debugging, UAT, technical documentation

PROFESSIONAL EXPERIENCE

Kore.ai

Dec 2025 - Present

Forward Deployed AI Engineer

Selected clients: Citi Bank, Bayer, SaludSa | Banking, healthcare, pharmaceuticals

- Architected migration of a pharmaceutical medical-information copilot spanning three agents, four workflows, and 11 guardrail configurations; redesigned the entry point and IVR routing for US and German markets.
- Integrated two use cases into an existing production healthcare agent within a 15+ agent system, reducing duplicated flows and replacing legacy MCP integrations with code-based tool calls.
- Owned client-facing delivery for a pharmaceutical copilot with an implementation partner, coordinating stakeholder communication, timelines, and integration dependencies.
- Isolated an agent-platform parameter-resolution defect through systematic hypothesis testing; delivered a minimal reproduction and defect report to platform engineering.
- Developing a banking WhatsApp assistant migration spanning 20 agents and 29 tools; produced the use-case inventory, technical reference, and delivery estimates, using mock endpoints during development.
- Documented 14 agent-platform migration learnings for team reuse, capturing implementation patterns and issues encountered during delivery.

Lore Health

Jul 2025 - Oct 2025

Machine Learning Engineer

- Built production Python pipelines for conversational anomaly detection across 50,000+ daily messages at under 200 ms latency.
- Developed synthetic datasets and conducted 200+ fine-tuning experiments, improving anomaly-detection precision by approximately 12%.
- Implemented model guardrails, approval workflows, and incident-response procedures with Compliance, Data, and Research teams.
- Built TeamsBot and n8n workflows to automate identity, access, and infrastructure requests through APIs, reducing setup time from hours to minutes.

PROFESSIONAL EXPERIENCE CONTINUED

Barclays Bank

Dec 2021 - Jun 2025

Senior Business Insights Analyst | GenAI Team, COO Organization

Joined as Business Insights Analyst; promoted to Senior Business Insights Analyst.

- Engineered Python/NLP quality-assurance pipelines analyzing 1.5 million+ customer calls monthly to identify potential compliance issues.
- Built forecasting models in Python, PySpark, and AWS to support operational planning and business decisions.
- Led six UAT rounds to refine profanity detection and call-state handling, reducing false positives from approximately 5,000 to 50 per month.
- Delivered dashboards, automated reports, and model-driven recommendations used by 100+ senior stakeholders.

Caterpillar

2020

Business Analytics Internship

- Analyzed consumer behavior in Power BI and developed an adoption roadmap supporting B2B and B2C platform migration.

SELECTED PROJECTS

agent-evals | Open-source Python project | GitHub

Implemented five heuristic checks across 22 synthetic banking and healthcare cases: escalation, PII leakage, disclosures, forbidden claims, and action correctness; added tests and CI.

Topologies of Thought | Interactive project

Built a 3D knowledge graph navigated through hand gestures using Three.js and MediaPipe.

TEACHING AND PROFESSIONAL SERVICE

- Guest Lecturer, UT Dallas: Invited twice to the MS Project Management program to teach applied AI and project leadership through The Real AI Playbook.
- Ethics Reviewer, NeurIPS 2026; Member, IEEE Computer Society.

EDUCATION

Pennsylvania State University

2019 - 2021

Smeal College of Business

Master's in Business Analytics; Master's in Management and Organizational Leadership

SRM Institute of Science and Technology

2014 - 2018

B.Tech, Information and Telecommunication Engineering

CERTIFICATIONS

PMP (PMI)

AWS Certified Machine Learning Engineer - Associate

AWS Certified AI Practitioner