

# Neelapu Dhanushree

USA | +1 443 497 4377 | [neelapudhanu@gmail.com](mailto:neelapudhanu@gmail.com) | [LinkedIn](#)

## PROFESSIONAL SUMMARY

Product-focused AI Engineer with 5+ years of experience building and launching AI-powered enterprise products. Strong in strategy, user research, and execution, with a track record of turning complex problems into measurable outcomes.

## SKILLS

- **Product Management & Strategy:** Product Roadmaps, Feature Prioritization, KPI Definition & Tracking, Leadership Reviews, Stakeholder Alignment, Change Management, Agile Scrum, Experiment Design & A/B Testing.
- **AI & Machine Learning:** Generative AI, Large Language Models (LLMs), AI Agents & Agentic Workflows, LangChain, LangGraph, Gemini, OpenAI API & SDK, Bedrock, ElevenLabs, Conversational AI
- **Programming & Prototyping:** Python, JavaScript, n8n, Gradio, LangSmith, Automation Workflows, Digital Twin Development, Crew AI, Microsoft AutoGen, MCP
- **Cloud & Data Platforms:** AWS (Bedrock, Lambda, S3), GCP, Azure, Kubernetes, Docker, Snowflake, BigQuery, PySpark, SQL, MongoDB
- **SDLC & Infra:** CI/CD, Lambda, Docker, Kubernetes, API Integration, Monitoring, Observability
- **Analytics & Visualization:** Power BI, Tableau, Looker, KPI Dashboards, Data-Driven Decision Making, Experiment Analysis
- **Tools & Delivery:** Jira, Confluence, Figma, Airflow, Kafka, BRDs & Specs, UAT Management, Risk Registers, Cross-Functional Team Leadership

## PROFESSIONAL EXPERIENCE

### AI Software engineer – Product | Secure Passage, Kansas City, USA

Dec 2025 – Present

- Contributing to two enterprise products, Haystax and Truman, delivering AI-powered data pipelines and product features across search, mapping, and printing workflows.
- Built an entity extraction and contextual search pipeline for Haystax using spaCy large models and Hugging Face Sentence Transformers, enabling customers to query structured and unstructured data via natural language input.
- Developed geospatial capabilities for Haystax by integrating geocoding-based map features, improving situational awareness and location-driven analysis for end users.
- Leading early-stage research and prototyping for Truman, designing pipelines for network-based digital printing workflows and evaluating feasibility, performance, and scalability.

### Technical Product Manager | NSP Systems, USA

Feb 2025 – Oct 2025

- Owned end-to-end roadmap and delivery of an AI-powered sales travel workflow, integrating n8n and Blotato, reduced planning cycle time from 1 week to 15 minutes and improved throughput by 40%.
- Led development of an LLM-driven internal knowledge assistant (RAG) enabling natural language search across 2000+ documents, cutting information retrieval time by 80%.
- Partnered with data engineers and SREs to achieve 99% uptime and <250ms inference latency, embedding monitoring and alerting into CI/CD; drove 100% adoption in 3 months and secured VP approval for next-phase funding.

### Technical Product Manager | Fresenius Medical Care, USA

Jan 2024 – Dec 2024

- Owned product strategy for a GenAI-powered HR Assistant (Gemini + GCP) handling 10K+ monthly interactions, reducing response time by 30%.
- Built a GenAI-driven adaptive patient education system using AWS Bedrock and Lambda; achieved 100% completion and 30% nurse time savings in pilot.
- Established KPIs, cost-optimization strategies (–40% prompt cost), and leadership dashboards (Power BI, QuickSight) for quarterly reviews.

### Graduate Research Assistant | Robert H. Smith School of Business, USA

Jan 2024 – May 2024

- Collaborated with **15+ corporate partners** to define requirements for a digital onboarding platform supporting university–industry partnerships.
- Managed a **\$30K budget**, delivering the project **8% under target** and reinvesting savings to expand partnership by **33%**.
- Designed and delivered a Figma-based prototype that accelerated partner commitment by **64%**, influencing funding and scale-up decisions.

### Software Development Engineer | NTT Data, India

Aug 2021 – Jul 2023

- Built AWS-based automation pipelines and data frameworks supporting enterprise planning and claims analytics systems.
- Introduced automated DevOps smoke testing, improving sprint velocity by **25%**, increasing test coverage by **30%**, and reducing manual testing by **85%**.
- Partnered with engineering, QA, and DevOps teams to scale systems supporting **15K+ monthly transactions**, improving reliability and CI/CD success rates.

## PROJECTS

### VisitComplete – AI-Powered Healthcare Documentation Assistant | Next.js, Tailwind, Clerk, Vercel Nov 2025 – Dec 2025

- Built an end-to-end SaaS platform that enables healthcare providers to complete post-visit documentation in under 30 seconds, saving 2–3 hours per day per provider.
- Implemented AI pipelines to generate 8 clinical outputs, including visit summaries, ICD-10/CPT codes, prior authorizations, patient communications, referral letters, and follow-up task lists.
- Designed a HIPAA-compliant architecture with secure auth (Clerk), real-time AI streaming, and a mobile-responsive, clinician-friendly UI.
- Deployed to production on Vercel; demonstrated feasibility for containerization and cloud deployment (Docker / AWS App Runner).

### LaunchLens – AI Product Intelligence Agent | LangGraph, LangSmith, Gradio

Sep 2025 – Oct 2025

- Built and launched an LLM-powered product-intelligence agent that automated competitor analysis and roadmap research for Product and Growth teams.
- Designed a multi-agent workflow using LangGraph (Worker → Tools → Evaluator) to synthesize positioning, market sentiment, and launch KPIs into structured, evidence-backed reports.
- Integrated real-time web tooling (Playwright, Serper, Firecrawl, Wikipedia, Python REPL) with LangSmith tracing to debug, evaluate, and optimize agent performance.
- Reduced manual competitive analysis time by 85% (60 → 9 minutes), validated through tracked analyst sessions and repeat usage.

### n8n – Automation Workflows | OpenAI, LangChain, ElevenLabs

Sep 2025

- Built and deployed 5 intelligent automation workflows across Gmail, LinkedIn, and voice-based assistants to streamline communication and task routing.
- Automated email classification, LinkedIn content generation, and voice-driven travel planning by orchestrating LLMs, third-party APIs, and event-driven workflows.
- Achieved 99.3% workflow success rate over 400+ executions, monitored via n8n dashboard metrics and run logs.
- Delivered ~12 hours/week in time savings through reusable, modular automation templates.

### AI SDR Agent – Autonomous Sales Outreach | OpenAI Agents SDK, SendGrid

Aug 2025

- Built an autonomous Sales Development Representative that drafts, personalizes, and sends outbound emails using persona-based agent orchestration.
- Implemented async task handoffs and tool calling with OpenAI Agents SDK and SendGrid for scalable outreach.
- Improved campaign performance with 22% higher open rates and 17% faster response times, measured across three pilot email campaigns.
- Demonstrated how agent guardrails and tools enable reliable, production-ready autonomous workflows.

## EDUCATION

### Master of Science in Information Systems Management

Aug 2023 – Dec 2024

University of Maryland, Robert H. Smith School of Business, College Park, MD, USA

- Terrapin Scholar Award – Awarded for academic excellence, accomplishments, and future promise.

### Bachelor of Technology in Information Technology

Jul 2017 – Jul 2021

Jawaharlal Nehru Technological University (JNTU) Hyderabad, India

## LEADERSHIP & IMPACT

- Experienced in leading agile pods (5–10 members) across the U.S. and India, driving predictable delivery and team health.
- Regularly present at leadership reviews; known for transforming insights into data-backed strategic decisions.
- Advocate for responsible AI; contributed to internal playbooks for privacy and ethical LLM deployment.
- Mentored junior PMs and engineers on roadmap design, prioritization frameworks, and KPI alignment.

## CERTIFICATIONS

- AWS Certified Solutions Architect – Associate
- Professional Scrum Master (PSM-I)
- Google Certified in Python, Machine Learning
- IT Project Management – ISB