N. Venkat Swaroop

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Professional Summary

Full-stack and DevOps engineer (B.Tech CSE, 2026) with 2+ years building and operating production software in React, Next.js, Python (Django, FastAPI), Node.js, PostgreSQL, MongoDB, Docker and GCP/AWS. Founder of NVS Ventures, where I designed, shipped and run multiple live SaaS products end to end, including a multi-tenant email platform and a voice-calling reminder service. Led a team of 4, ran services at 99.5%+ uptime, and integrate LLM APIs (Claude, Gemini, LangGraph, MCP) into real products. National hackathon winner, PyPI package author and co-inventor on a published patent application.

Technical Skills

Languages	Python, JavaScript, TypeScript, SQL, C, HTML, CSS
Frontend	React, Next.js, Tailwind CSS, Chart.js, WebSockets
Backend	Django, FastAPI, Node.js, Flask, REST APIs, Celery, Django Channels
Databases	PostgreSQL, MongoDB, MySQL, Redis, Firestore, DynamoDB
Cloud and DevOps	Docker, Docker Compose, GitHub Actions (CI/CD), GCP Cloud Run, AWS (EC2, S3, DynamoDB), Nginx, Gunicorn, PM2, Linux
Observability	Prometheus, Grafana, Sentry
AI and Integrations	Claude API, Gemini API, LangGraph, MCP (Model Context Protocol), Whisper, Twilio, Razorpay
Testing and Tools	Pytest, Jest, Git, GitHub, Postman
Hardware	ESP32, Arduino, IoT sensor integration

Professional Experience

Founder and Full Stack Engineer May 2026 – Present

NVS Ventures (Udyam-registered), Bengaluru

- Designed, built, launched and operate multiple live SaaS products (Koltrix, ReminderIt) as sole engineer, covering architecture, backend, frontend, deployment and billing.
- Run production infrastructure on Ubuntu VPS with Docker Compose, Nginx, Redis and MongoDB; tuned memory limits and swap and resolved disk-usage issues to keep multiple services stable on one host.
- Handled business setup end to end: MSME registration, payment gateway onboarding (Razorpay) and domain strategy.

Full Stack Developer Jun 2025 – Oct 2026

Xreacher, Remote

- Architected a chatbot-based messaging system in Next.js, Python and MongoDB handling 10K+ automated DMs per day across 50+ accounts with zero message drops.
- Built a lead-scraping pipeline and multi-account orchestration engine that cut manual outreach effort by 80% for the sales team.
- Deployed Prometheus and Grafana monitoring for roughly 170 PM2-managed processes, improving incident response time by 60%.

Lead Full Stack and DevOps Developer Aug 2024 – Jun 2025

GKVK Watershed Management, Hybrid (Part-time)

- Led a team of 4 to build real-time geospatial dashboards (React, Firestore) visualizing watershed data across 20+ field stations.
- Designed and deployed containerized microservices on Google Cloud Run, achieving 99.5% uptime and sub-200 ms API response times.
- Built a CI/CD pipeline with automated testing and staging, cutting the release cycle from 3 days to under 4 hours.

Full Stack Intern May 2024 – Aug 2024

Bryckel.AI, Remote

- Shipped 3 end-to-end features across a React frontend and Django backend in the first 6 weeks, including the user onboarding flow and analytics dashboard.
- Wrote unit and integration tests (Jest, Pytest) reaching 85%+ coverage on assigned modules.

Lead Full Stack Developer Jan 2024 – May 2024

Skillmithra.com, Hybrid (Freelance)

- Independently architected and deployed a learning platform (Django, PostgreSQL, AWS EC2) serving 500+ registered users.

- Built a custom admin dashboard with role-based access control and real-time analytics, deployed behind Gunicorn and Nginx with SSL.

Projects

Koltrix – Multi-tenant Email Infrastructure SaaS app.koltrix.com

Next.js, Python, PostgreSQL, Postfix, MinIO

- Built and launched a live platform combining multi-domain inbox, transactional REST API, SMTP relay and newsletter automation in one product.
- Implemented per-organization PostgreSQL schema isolation, Postfix inbound mail, DKIM and Rspamd deliverability, MinIO object storage, and HMAC-signed replayable webhooks.
- Deployed behind Nginx on Ubuntu with Docker and live in production.

ReminderIt – Voice-Calling Reminder SaaS reminderit.com

FastAPI, Celery, Redis, MongoDB, Next.js, Twilio

- Launched a service that places timezone-aware phone calls in natural neural voices, with automatic WhatsApp fallback and hands-free reminder creation by calling in.
- Built asynchronous scheduling with Celery and Redis and usage-metered billing; deployed with Docker Compose on a memory-tuned VPS.
- Published an MCP server so AI assistants can create and manage reminders.

AliasMode – Browser Profile and Proxy Management Dashboard Freelance client project

Bun, TypeScript, AdsPower API

- Built a dashboard on top of the AdsPower API to manage browser profiles and proxies at scale.
- Deployed as a Windows service using NSSM with log rotation and boot persistence; diagnosed and fixed a port-binding conflict (winnat/WSL2 reserved ranges).

LRI Mitra – AI Agricultural Advisor Robot GKVK, UAS Bangalore (COE-WM)

Ubuntu, HTML kiosk UI, LLM, hardware integration

- Building a multilingual (Kannada, English, Hindi, Telugu) voice-interactive robot with an agentic AI engine that reads farmer soil report (LRI) cards through a camera using a vision-language model, recommends crop-specific fertilizer doses, and diagnoses crop diseases from plant images.
- Designed the system around a mini PC running Ubuntu, a face display plus touchscreen interface, and a LiFePO4 battery power system.

Krishi Pragya – Smart Irrigation Dashboard

React, Firebase Realtime DB, GCP

- Real-time IoT sensor visualization with threshold alerts and historical trends.

AI Adaptive Quiz

React, Django REST, Whisper, Gemini API

- Adaptive learning platform using Q-learning to tune question difficulty in real time, with speech-to-text input and LLM-generated questions.

NvsMeet – Real-time Video Calling

Django Channels, WebRTC, WebSockets

- Multi-peer rooms with screen sharing over WebSocket signaling.

Open Source: nvs-bootstrap-forms (PyPI), github.com/venkatnvs

Education

Dayananda Sagar College of Engineering, Bengaluru 2022 – 2026

B.Tech, Computer Science and Engineering

Coursework: Data Structures and Algorithms, DBMS, Operating Systems, Computer Networks, Software Engineering, Machine Learning

Patent Application

Co-inventor, Indian Patent Application No. 202641127012 A Filed 25 Oct 2026, published 30 Oct 2026

AI-Based Multilingual Voice-Interactive Farming Robot and Method for Personalized LRI Card-Crop-Fertilizer Advisory

- Joint application by the Centre of Excellence on Watershed Management, UAS (GKVK), and Dayananda Sagar College of Engineering; status: published, pending examination.

Achievements

- 1st place among 500+ teams, WIEHack 5.0
- Winner, BIT N-BUILD (Google Developer Groups, UVCE); qualified for the Mumbai finals
- Winner, GenZPreneur (International School of Business) for an assistive-tech solution for visually impaired users
- 2nd Runner-Up, BLUEPRINT (IIT Delhi); 3rd place, Hack-o-Ram (DSCE); 1st place, Coding Relay (DSCE)
- Published open-source package nvs-bootstrap-forms on PyPI