

M VAMSI KRISHNA

Senior Backend Engineer | Python | SaaS & AI Platforms

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Bangalore, Karnataka, India
ProPegasus

SUMMARY

Senior Backend Engineer with 8 years of experience building scalable multi-tenant SaaS platforms, AI-enabled products, and cloud-native distributed systems in Python. Deep expertise in Django, FastAPI, and event-driven microservices (Celery, RabbitMQ, Kafka) deployed on AWS and Azure with Kubernetes, Terraform, and CI/CD. Delivered authentication, file, and data platforms serving 5M+ users at 500+ TPS; currently building LLM-agent tooling and large-scale ingestion pipelines for enterprise clients including Google and a major US podcast & radio network. Lead stakeholder requirement discussions and drive engineering quality through system design, code reviews, testing, and observability.

SKILLS

Languages: Python, SQL, JavaScript

Backend: Django, Django REST Framework, FastAPI, Flask, Celery, SQLAlchemy, Pydantic, REST APIs, Microservices

Cloud: AWS (EKS, Lambda, S3, Secrets Manager, Glue), Azure (AKS, Functions, Event Hub, Blob Storage, Container Apps)

DevOps: Docker, Kubernetes, Terraform, CI/CD, GitHub Actions, Azure DevOps, Jenkins

Data & Messaging: PostgreSQL, MySQL, Redis, Elasticsearch/OpenSearch, RabbitMQ, Kafka

Observability & Testing: Prometheus, Grafana, New Relic, structured logging, Pytest, unit & regression testing

Architecture & Security: System design (HLD/LLD), multi-tenant SaaS, event-driven architecture, distributed systems, OAuth2.0, JWT, RBAC, encryption

AI: LLM agents, tool calling, Agentic AI, OpenAI API integration, prompt engineering, OpenCV

EXPERIENCE

Pod Lead (Senior Backend Engineer)

Turing

📅 Sep 2025 – Present

📍 Bangalore, India

Client: Major US Podcast & Radio Network (under NDA) — Podcast Ingestion Platform Python, Celery, FastAPI, RabbitMQ, Kafka, PostgreSQL, Redis, Elasticsearch, AWS EKS, Terraform

- Core engineer on the distributed, event-driven ingestion platform powering the client's entire podcast catalog — a 21-package Python monorepo of pipeline workers, FastAPI services, and AWS Lambdas that detects RSS feed changes, ingests shows and episodes, and publishes updates downstream via Kafka.
- Led the ground-up migration of the catalog scan scheduler from a legacy Java Quartz system to a Python Celery/RedBeat architecture: 5 coordinated services on AWS EKS with frequency-tiered scheduling (5-minute to weekly), priority-based RabbitMQ routing, distributed deduplication locking, and publish timeout/retry safeguards.
- Owned load testing and bottleneck analysis on a dedicated environment, tuning worker concurrency and queue roles to validate the new scheduler at production-scale catalog volumes and de-risk the cutover.
- Extended the pipeline end-to-end for video podcasts: RSS parsing, SQLAlchemy models with Alembic migrations, RabbitMQ message schemas, and downstream Kafka contracts.
- Built Terraform-managed AWS Secrets Manager integration with GitHub Actions OIDC roles across dev and prod accounts, eliminating long-lived credentials from CI/CD pipelines.
- Instrumented full observability for the scheduling system: Prometheus metrics, Grafana dashboards, New Relic APM, and structured logging shipped to Elasticsearch for cross-service failure tracing.

Client: Google — Agents API Simulation Platform Python, FastAPI, Pydantic, Redis, Pytest, AI Agents

- Led development of simulated real-world service APIs used to train and evaluate LLM agents on production-style tool calling — strict tool specifications, stateful endpoint behavior, and schema-first Pydantic validation for deterministic, reliable execution.
- Partnered directly with Google stakeholders on requirements, led peer reviews, and strengthened Pytest regression coverage across the platform (team of 6).

Software Engineer — Senior

Centific

📅 Aug 2023 – Aug 2025

📍 Bangalore, India

Authentication Service (SaaS Product) Python, Django REST Framework, PostgreSQL, Redis, Celery, OAuth2.0, AKS

- Designed and delivered a multi-tenant authentication and authorization platform: OAuth2.0 and JWT flows, RBAC, password policies, and service-to-service authentication sustaining 500+ TPS for 5M+ users, with onboarding APIs and admin workflows adopted by multiple internal and external client integrations.

Upload Service (SaaS Product) Django, Azure Blob, AWS S3, GCP Storage, Kubernetes

- Sole engineer on a multi-tenant file management platform exposing a unified REST API across three clouds, with chunked and resumable transfers, background processing, encryption, lifecycle policies, and tenant isolation for cross-cloud compliance.

Data Marketplace (Centific Product) Python, FastAPI, Redis, Microservices

- Lead engineer (team of 12) on an enterprise platform for validated large-scale datasets: designed identity management, integrations with annotation platforms (OneForma, Roboflow), microservice deployment patterns, and a Redis-queued cross-cloud data transfer service for reliable asynchronous workflows.

Pitaya (AI SaaS Product) Django, Azure Event Hub, Azure Functions

- Built event-driven backend services for a multi-tenant AI retail-analytics platform converting store cameras into real-time insights and alerts, collaborating with cloud and AI teams.

Technical Coordinator — Senior

The Scalers

📅 Apr 2022 – Aug 2023

📍 Bangalore, India

Feedback Analyzer (AI Automation) Python, OpenAI API, Google Sheets API, Slack API, AWS Lambda

- Built an end-to-end AI feedback analysis workflow deployed as a scheduled AWS Lambda with Google Sheets and Slack integrations — automated manual review work and cut feedback turnaround time.

Coding Tug of War (Web-Based Game) Django REST Framework, JavaScript, Redis, Sphere Engine

- Developed a real-time two-player coding challenge platform with Redis-backed live score and game state, and sandboxed multi-language code execution via Sphere Engine.

Web Developer — Full Stack

Dharani Projects Pvt. Ltd

📅 Aug 2018 – Apr 2022

📍 Visakhapatnam, India

- Built and maintained full-stack web applications with Django, MySQL, JavaScript/jQuery, and HTML/CSS — relational data modeling, REST APIs, and admin workflows for business clients.
- Owned deployments and production support end-to-end, including AWS S3-backed media storage and automated email notifications.

FREELANCE & PERSONAL PROJECTS

SouthScape — southscape.tours (SaaS Tour Booking Platform) Django, PostgreSQL, Redis, Azure Container Apps, Azure Blob

- Founded, built, and operate a multi-tenant tour-booking SaaS for South India: SEO-optimized public sites, online checkout with a pluggable payment-gateway layer (Razorpay, PhonePe) and encrypted credentials, partner dashboards with DNS-verified custom domains and premium themes, agent portals with settlement tracking, availability and date-based dynamic pricing engines, and secure web check-in with encrypted traveller identity data. Deployed and operated solo on Azure Container Apps.

RoK Bot (Game Automation) Python, OpenCV, Tkinter, Django, ADB

- Built a subscription-based desktop automation tool using OpenCV computer vision to drive Android emulator instances over ADB, with captcha verification and multi-instance execution.

Nethram Arts (Talent & Recruitment Platform) Django, SQL, jQuery, AWS S3

- Developed a talent and opportunity platform for film-industry professionals — profile building, opportunity discovery, and talent search for recruiters and producers.

AWARDS

3× quarterly awards at Centific — Star Award (Q3 & Q4 2024) and Team Excellence Award (Q1 2024); Spot Award at The Scalers (Q4 2022).

EDUCATION

B.Tech, Mechanical Engineering

Sri Vasavi Engineering College, Tadepalligudem

📅 2014 – 2018