

VAMSI CHAPA

Technical Lead • Full Stack Developer • AI Solutions Engineer

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SUMMARY

Technical Lead with 10 years building backend, web and cloud software. Most of the recent work is media processing and annotation platforms: services in Python/FastAPI and .NET, deployed on Azure and AKS, with LLM calls wired into the delivery workflow. Also handles the architecture, documentation and engineering handoff for annotation programs.

TECHNICAL SKILLS

Languages: Python, C#, TypeScript, JavaScript (ES6+), SQL

Backend: FastAPI, ASP.NET Core, Node.js, Web API, REST, event-driven services, background job workers

Frontend: Angular, React, HTML5, CSS3

Data: PostgreSQL, SQL Server, MongoDB, Cosmos DB, Redis, Alembic migrations, Apache Kafka

AI/ML: LLM integration (Azure OpenAI, Anthropic), prompt and evaluation design, pandas, NumPy, scikit-learn, model fine-tuning

Cloud/DevOps: Azure (AKS, Durable Functions, Storage Queues, ACR, Static Web Apps), AWS S3, Docker, Kubernetes, Terraform, GitHub Actions, Azure DevOps

Platforms: Label Studio / DataCanvas annotation stack, AIDF model services, media processing and delivery pipelines

Practices: Agile/Scrum, microservices, layered and SDK-first architecture, CI/CD, observability, technical documentation

EXPERIENCE

Centific (formerly Pactera EDGE)

Technical Lead, Solutions Engineering

Transferred from India in 2024

Irving, TX

May 2022 – Present

- Main developer on a FastAPI media service that validates, reviews and ships media for annotation programs. Around 65 API routers, seven background jobs, a separate delivery worker and a serverless compression sidecar.
- Built the delivery path through it: validation rules, reviewer workflow, ground truth readiness markers, deduplication and reconciliation tools, and the dashboard delivery leads use to find where a batch is stuck.
- Built the asset handling behind it: ingest, metadata, versioning, tagging, search and filtering, access control, processing status, archival and export for downstream annotation.
- Added client and project management features on top of the service: account and contact records, opportunity intake, onboarding workflows, requirements tracking, delivery status visibility and reusable operational reporting.
- Wired in LLM calls for PHI redaction and annotation prefill, each combining model output with a rule-based pass. Ran the Azure OpenAI and Anthropic comparison that decided which models the service uses.
- Set up and maintain the deployment on AKS across development, staging and production, including container images, configuration and secrets, autoscaling, scheduled jobs and GitHub Actions pipelines.
- Build annotation projects on the Label Studio / DataCanvas platform: labeling configurations, custom JavaScript plugins, task builders and export scripts, covering text, conversational, video and image work. Wrote the annotator and reviewer guidelines for two pilots.

- Write the requirements, solution architecture, backend reuse assessments and capacity and cost models for new client work. Created the intake framework the team now uses, which captures the business need, estimates scope and tracks an opportunity from first conversation through to delivery.
- Earlier at Centific: led an AI video analytics build with an Angular review UI, Python model tuning for detection and event tagging, and REST APIs for metadata search. Before that, logistics modules for route optimization and load planning in React, Node.js, Kafka and Cosmos DB.

ValueMomentum

Hyderabad, India

Senior Software Engineer

Jan 2021 – May 2022

- Worked on insurance platform features in AngularJS and ASP.NET MVC. Refactored legacy backend code and rewrote SQL Server procedures that ran slowly against large policy datasets.
- Worked with business analysts to pin down requirements in legacy insurance workflows, in a domain where the regulatory constraints are part of the spec.

SumTotal Systems

Hyderabad, India

Full Stack Developer

Dec 2016 – Jan 2021

- Built REST APIs and secure integration endpoints in ASP.NET for enterprise learning-management deployments, including a mobile-launch partner integration.
- Rebuilt the advanced search on the assessment modules and tuned the queries behind it for high-volume data.

EDUCATION

B.E. + M.E., Mechanical Engineering, Andhra University

2011 – 2016