Preetham Raj Ramraj

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Summary

Full-Stack Engineer with 5+ years of experience building production web platforms, cloud-native systems, and AI-powered product features using Next.js, TypeScript, Python, FastAPI, AWS, and Docker. Experienced in LLM integration, LangGraph-based agentic workflows, document parsing, structured extraction, and scalable full-stack delivery across startup and enterprise environments.

Skills

Front-End	Next.js, ReactJS, TypeScript, JavaScript, HTML5, CSS3, Tailwind CSS, Bootstrap
Back-End/Server-side	Python, FastAPI, NodeJS, REST APIs, Microservices, JWT Auth, Auth0, PHP, SQL, Prisma ORM
AI / Applied ML	LLM Integration, LangGraph, LangChain, Agentic Workflows, Prompt Engineering, PaddleOCR-VL
and more	Document Parsing, Structured Extraction, Output Validation, Chatbot Systems, Recommendation Systems
Cloud / DevOps	AWS (Lambda, ECS, API Gateway, DynamoDB, S3, SES), Docker, Git, GitLab CI/CD, Linux, Bash
Databases / Tools	PostgreSQL, MySQL, MongoDB, Postman, Jest, Jira, Jupyter, Vim
Certifications	Microsoft Generative AI Engineering	Agile Project Management & Delivery	Google AI Essentials

Experience

UPSY, *AI Lead / Full-Stack Engineer* | Remote — *Nov 2025 – Present*
- Defined and shipped **4 core AI features** — course recommender, readiness/experience-fit scoring, resume-brochure parsing, and bridge-learning paths — using **LangGraph**-based agentic workflows, structured LLM extraction, and deterministic tag-based matching logic to improve recommendation quality, explainability, and reduce manual onboarding effort.
- Designed OCR and parsing pipelines using **PaddleOCR-VL** and LLM-assisted extraction to normalize resumes and brochures into structured skill, experience, and program-fit signals for downstream recommendation flows.
- Led full-stack delivery across **Next.js / TypeScript** frontend flows, **Python / FastAPI** AI services, and **Prisma**-backed data models, aligning sprint execution with evolving product requirements and team members/interns engineering output.

IIIT-Hyderabad, *Senior Software Engineer* | Hyderabad, TS — *Oct 2023 – Present*
- Built and deployed an in-house **Visitor Management Platform** using **React / Next.js**, **FastAPI**, **Firebase / Firestore**, and **LDAP SSO**, replacing a commercial solution and reducing gate delays by **40%**.
- Replaced slow ERP workflows with **FastAPI / Docker** microservices on **AWS ECS**, improving page-load speed by **2x** across attendance, leave, and billing modules while enabling more reliable releases.
- Engineered a QR-based asset tracking and billing workflow on **AWS Lambda**, **API Gateway**, and **DynamoDB**, reducing audit effort by **30%** and cutting billing turnaround time by **75%** through automated invoicing via **AWS SES**.
- Built event and payment portals with **Razorpay**, automated invoicing, multi-currency support, and analytics, supporting **500+ participants** including **300+ international attendees**, while sustaining **99.9%** uptime via **GitLab CI/CD** and containerized deployments.

Sniffi, *Full-Stack Lead / AI Consultant* | Pune, MH (Remote) — *Jan 2025 – Present*
- Led end-to-end architecture and delivery of an AI chatbot with a **Python** backend and **Mistral** LLM, deployed on containerized **AWS ECS / Lambda** with JWT-authenticated APIs and integrated into Sniffi's **Flutter** app for navigation, booking, and tele-consults.
- Delivered the solution in **3 months** and supported rollout to **200+ active users**, coordinating chatbot flows, backend contracts, client syncs, and release execution from wireframes to deployment.

Samsung Electronics America, *RF Engineer II (Deployment and Automation)* | Plano, TX — *Jun 2021 – Jul 2023*
- Built **Python**, shell, and **VBA**-based automation for KPI reporting, RFDS/CIQ generation, validation, and visualization, reducing manual processing time by **90%** (**20 hrs to 2 hrs**).
- Developed cloud-integrated verification workflows across **FTP servers** and **AWS S3** data sources, shortening migration validation cycles by approximately **50%** while improving data integrity checks.
- Improved **LTE / 5G** deployment stability by **15%** across TX/OK markets through performance analysis, throughput debugging, and field validation across DSS, C-Band, and Clean NR technologies.

Innovative Consulting Solutions, LLC, *Application Developer* | Chicago, IL — *Aug 2020 – Jun 2021*
- Built interactive dashboards with **ReactJS** / **Node.js**, improving page-load time by **2 seconds** across key workflows.
- Implemented secure authentication with **Auth0** and built reusable, CI-tested **ReactJS** components with **Jest** and **Cypress**, reducing deployment errors by **30%**.

Commonwealth Bank, *Junior Web Developer (Contract)* | New York, NY — *May 2020 – Aug 2020*
- Built youth-focused banking UI features and prototypes using **React**, **JavaScript**, and **Bootstrap** for digital banking experiences.

Education

3.6/4.0	**PG Program in AI/ML - Specialization in Agentic AI and MLOps**, *IIIT-H*	Telangana, India	*Ongoing*
3.3/4.0	**BS in Computer Science (Minor: Entrepreneurship)**, *University of Wisconsin, Madison*	Wisconsin, USA	*2016-20*

Project(s)

Visitor Management Application — *Oct 2023 – Present*
- Built an in-house **Next.js / FastAPI**-based visitor management platform with **Firebase / Firestore**, **LDAP SSO**, QR entry, and automated alerts, reducing gate delays by **40%**.

Voice-Enabled Chat Assistant — *2025 – Present*
- Built voice-enabled assistant prototypes including an **Amazon Alexa** assistant and a selector-style conversational interface using backend decision logic and LLM-supported task flows.