RATNESHWAR PAL

Lead Full-Stack Engineer | Technical Lead

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Professional Summary

Lead Full-Stack Engineer with 11+ years of experience building web and mobile products in fintech, healthcare, analytics, and AI-enabled retail. Expert in React, TypeScript, Node.js, design systems, and configurable multi-client platforms. Now building Agentic AI products with LangGraph and FastAPI.

Key results

- Re-architected a multi-client platform, cutting client onboarding from 3–4 months to under one week.
- Introduced specification-based, AI-assisted development, cutting module delivery from ~5 weeks to 10–12 days.
- Developed a multi-agent AI platform with supervisor orchestration.

Core Skills

Frontend & Architecture: React, TypeScript, JavaScript (ES6+), React Native, Redux, HTML5, CSS3, frontend architecture, design systems and design tokens, reusable component libraries, configurable multi-tenant platforms, accessibility, frontend testing (Jest, Tape)

Backend & Data: Node.js, Express, Python, FastAPI, WebSockets, REST APIs, Go APIs (integration), MongoDB, PostgreSQL, ClickHouse, Firebase Authentication

Agentic AI: LangGraph, multi-agent orchestration, Text-to-SQL, GitHub Spec Kit, specification-first development, AI-assisted code generation

DevOps & Delivery: Docker, Jenkins, CI/CD, AWX (Ansible), Git

Leadership: Technical strategy, architecture reviews, hiring and interviewing, mentoring, performance reviews, career development plans

Professional Experience

Lead Software Engineer | Impact Big Data Analytics Pvt. Ltd.

Nov 2021 – Present

- Lead technical architecture and delivery across four product lines, including a configurable multi-client platform that reduced client onboarding from 3–4 months to under one week.
- Introduced specification-based, AI-assisted development that reduced module delivery from ~5 weeks to 10–12 days. Developed a LangGraph multi-agent AI platform for retail assortment planning.

AgenticAssort | Multi-Agent Assortment Intelligence Platform | Since Feb 2026

- Developed a multi-agent AI architecture with LangGraph. A Supervisor orchestrates specialized agents for assortment analysis, store clustering, and strategic buying recommendations.
- Built real-time AI interactions with Python, FastAPI WebSockets, and Firebase Authentication, with persistent conversational context.
- Architected the TypeScript frontend and a design token system for consistent theming and reusable UI components across product modules.
- Introduced GitHub Spec Kit specification workflows and AI-assisted module development, cutting delivery cycles from ~5 weeks to 10–12 days.
- Authored specification templates, review processes, and quality guardrails for generated code, including testing and accessibility checks.

MondaySmart | Multi-Client Platform | Feb 2023 – Feb 2026

- Redesigned the frontend repository and configurable flows, cutting client onboarding from 3–4 months to under one week.
- Defined shared codebase patterns that serve varying client requirements from one codebase, making fast onboarding repeatable. Mentored engineers on repository design and reusable configurations.

Demo Tool | Apr 2022 – Feb 2023

- Engineered a JSON-based demo platform with React, Python, and Google Sheets as a live data source. Sales teams could configure product demos within a week.
- Added cascading filters and runtime customization so sales teams could tailor client-facing demos live.

TestSmart | Nov 2021 – Apr 2022

- Modularized Redux state management and async API integration. Shipped save-and-reuse filter templates across screens.

Senior Software Engineer | Accion Labs (Consulting at PayPal)

Jul 2020 – Nov 2021

- Migrated 40+ production notification templates supporting 205 languages for PayPal's notification and WorldReady teams.
- Created a JSON-payload-based template preview tool. Contributed to merchant pricing legal pages and supported Jenkins/AWX deployments.

Senior Software Engineer | DSBL Pvt. Ltd.

Sep 2019 – Jul 2020

- Established React Native UI architecture for Neo91, an Android payments and rewards app. Replaced duplicated admin forms across 10–12 variants with metadata-based forms, reducing maintenance effort.
- Architected the full stack for Antwak Learning mobile applications: React Native on the client, Node.js and Express APIs, and PostgreSQL for data.

Software Engineer | Pratian Technologies

Sep 2015 – Sep 2019

- Owned end-to-end delivery of the Letters and History modules for a utilization management platform.
- Designed the system architecture and REST APIs for ZingUpLife using React Native, Node.js, Express, and MongoDB.

Education

B.Tech | BBDNIIT, Lucknow | 2011 – 2015