

PARAG SINGH

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SUMMARY

Full Stack AI Developer with 3+ years of experience building production AI agents, MCP servers, and RAG systems, owning features end to end across frontend, backend, cloud, and DevOps, and delivering measurable impact in AI-driven DevOps automation, cloud cost optimization, predictive monitoring, and enterprise AI infrastructure.

PROFESSIONAL EXPERIENCE

Project Lead, Software Engineer

Aug 2023 – Present

Honeywell International, Inc.

Bengaluru, India

- Led an 8-engineer team to deliver AI-powered platforms for DevOps automation, cloud cost optimization, adoption analytics, and customer experience across enterprise engineering workflows.
- Implemented Model Context Protocol servers enabling AI agents to execute validated DevOps operations through schema-validated tool calling, ingress routing, hardened containers, and audit logging.
- Architected a capacity management application for product resource planning, identifying infrastructure limits and forecasting future scaling requirements, reducing resource over-provisioning by 30%.
- Developed a GitHub Actions MCP server exposing 8 specialized tools for workflow management, log analysis, YAML validation, and token-aware diagnostics using smart truncation, error-only, and head/tail strategies.
- Built an autonomous Coverity code-remediation agent using FastAPI, React, LangChain, Azure OpenAI GPT-4, and Tree-sitter; processed 10,435+ defects and generated 1,119 PRs with 30–40% developer adoption.
- Designed an enterprise RAG troubleshooting assistant using Azure OpenAI, LangChain, Qdrant, hybrid search, re-ranking, and citation-backed responses over 4,500+ internal documents.
- Engineered an AI-driven predictive monitoring tool using machine learning anomaly detection to isolate build failures, increasing deployment frequency by 40% and reducing incident downtime by 15%.
- Shipped a cloud resource optimization application identifying underutilized resources worth \$175,000 per quarter, enabling 5–7% recurring savings.
- Automated an intelligent alert monitoring system to identify and mitigate recurring incidents, reducing incident volume by 40% and improving system reliability.
- Mentored 2 full-stack AI engineers and 10+ interns; created onboarding playbooks and coding standards for agentic AI design and production AI architecture.

SDE Intern

Jan 2023 – Jun 2023

Honeywell International, Inc.

Bengaluru, India

- Built an application to streamline resource management, enabling efficient monitoring and control of cloud assets in Azure.
- Engineered a centralized key vault with role-based access control to securely manage credentials and secrets across systems.

EDUCATION

Vellore Institute of Technology, Vellore, India

Jul 2019 – Jun 2023

B.Tech in Computer Science and Engineering, 8.8/10 CGPA

S.S.A.P, Ambikapur, India

Apr 2016 – May 2018

Science with Mathematics, 91%, Higher Secondary

ACTIVITIES & ACHIEVEMENTS

- **Awards & Impact:** Received 5 awards for excellence in innovation & value creation for customers at Honeywell. (2023–2026)
- **Bulls & Bears (Finance Club | Board Member):** Organized 10+ finance workshops and seminars, increased student attendance by 40%, and helped grow club membership to 200+ students. (Vellore, 2021)

SKILLS

Languages

JavaScript, TypeScript, Python, SQL, HTML, CSS

Frontend & Backend

React.js, Next.js, Redux, Tailwind CSS, FastAPI, Node.js, Express.js, REST APIs, WebSockets

AI & Agents

LangChain, RAG, MCP, AI Agents, Azure OpenAI, Qdrant, Tree-sitter

Cloud & DevOps

Azure, AKS, Kubernetes, Docker, Terraform, CI/CD, GitHub Actions, Git

Databases & Tools

PostgreSQL, Redis, Firestore, Prometheus, Grafana, LangSmith