

GAUTAM RAJU

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PROFESSIONAL SUMMARY

Software Engineer with 3+ years building generative AI solutions and enterprise systems at Apple and Ancestry. Completing MS in Computer Science (Apr 2026) with expertise in prompt engineering, LLMs, and full stack development using Python, Go, TypeScript, and React.

EDUCATION

Northeastern University

Master of Science, Computer Science GPA : 3.7/4.0

Sep 2024 - Apr 2026

- **Coursework:** Artificial Intelligence, Machine Learning, Distributed Systems, Software Engineering

Visvesvaraya Technological University

Bachelor of Computer Science, GPA : 8.05/10.0

Aug 2016 - Jul 2020

- **Coursework:** Artificial Intelligence, Machine Learning, Data Structures, Algorithms, Software Engineering

WORK EXPERIENCE

Ancestry

Platform Engineer Co-op (EKS Team)

Jun 2025 - Dec 2025

- Built backend services and RESTful APIs using Python and Go on Kubernetes serving 8 engineering teams, reducing API response latency by 45 percent
- Developed automation workflows and tooling with AI assisted using Claude and GitHub Copilot, reducing development time by 50%
- Owned CI/CD infrastructure with GitHub Actions executing automated unit tests and integration tests, achieving 90 percent coverage
- Collaborated with cross functional teams translating technical requirements into scalable solutions with comprehensive testing and
- Established observability framework using Prometheus and Grafana, reducing MTTR by 30 percent through proactive monitoring

Apple Inc.

Software Engineer

Sep 2021 - Jul 2024

- Owned AI powered features using LLMs with prompt engineering techniques, improving user productivity by 45 percent
- Delivered distributed backend systems handling 100M plus monthly requests with 99.97 percent availability using Python and Go
- Drove GraphQL and REST API implementation with comprehensive testing and code reviews, reducing production bugs by 40 percent
- Established log analysis and monitoring infrastructure for debugging and performance optimization across distributed systems
- Led agile team collaboration participating in technical design, code reviews, and continuous improvement initiatives

PROJECTS

Cloud Resource Lineage Tracker

- Developed open source MCP server using Python integrating CloudTrail, Cost Explorer, Terraform state, and Git history analysis
- Implemented Claude powered natural language interface for teams to query resource lineage, cutting investigation from 2 hrs to 5 sec
- Automated compliance auditing cross referencing CloudTrail events, Terraform state, tags, metrics, and Git commits
- Built dependency mapping preventing production incidents by identifying mystery resources across 500 plus AWS resources

Automated Code Security Reviewer

- Architected code analysis tool using Python with GPT 4 providing automated review suggestions and security detection
- Implemented context aware prompting with repository analysis and standards injection, achieving 80 percent useful suggestion rate
- Built REST API with rate limiting and caching processing over 1000 pull requests with under 2 second response
- Designed evaluation framework using LLM as judge comparing suggestions against human feedback for continuous improvement

AI Documentation Assistant

- Built developer portal using TypeScript and React with GraphQL API enabling natural language documentation search
- Implemented RAG system with vector database indexing documentation and API references, improving relevance by 65 percent
- Designed prompt pipeline with few shot examples generating contextual code snippets, reducing lookup time by 55 percent
- Developed monitoring tracking queries, relevance scores, and user feedback with 88 percent satisfaction ratings

TECHNICAL SKILLS

- **Languages:** Python, Go, TypeScript, JavaScript, React, SQL
- **Generative AI:** Prompt Engineering, LLMs, OpenAI API, Claude API, GPT 4, Enterprise AI Solutions
- **AI Frameworks:** LangChain, RAG Systems, Vector Databases, Model Context Protocol, AI Agents
- **Frontend:** TypeScript, React, GraphQL, Frontend Applications, Developer Portals
- **Backend & APIs:** REST APIs, GraphQL, Microservices, API Development, Distributed Systems
- **Databases:** PostgreSQL, MySQL, Neo4j, Elasticsearch, Snowflake, Kafka (familiar)
- **Cloud & DevOps:** AWS, Kubernetes, Docker, CI/CD, GitHub Actions, Infrastructure as Code
- **Testing & Quality:** Unit Testing, Integration Testing, Code Reviews, Log Analysis, Performance Optimization
- **Collaboration:** Agile, Cross Functional Teams, Technical Design, Mentorship, Continuous Learning