

# KAVYA RAPOLU

## Senior Software Engineer

@ kavyarapolu821@gmail.com  
☎ +1 919-951-5016

in linkedin.com/in/kavya15x0/  
📍 Boca Raton, FL

🔗 github.com/kavyarapolu

## EXPERIENCE

### AI-Accelerated Full-Stack Engineer

#### Upwork, Boca Raton, USA

📅 Aug 2023 – Present

- Shipped 8+ production features using Claude Code and Cursor agentic workflows, achieving 3-4x development velocity vs. traditional methods; maintained production uptime with rapid iteration cycles.
- Built full-stack systems combining React/TypeScript frontends with Node.js/Python backends; deployed infrastructure-as-code (Terraform) on AWS with automated provisioning and multi-environment support.
- Implemented security-focused code review process for AI-generated solutions: detected hallucinated dependencies, injection vulnerabilities, cryptographic misuse, and context drift before production merge.
- Architected AI-first systems with modular codebases, clear API contracts, and separation of concerns enabling effective parallel agentic sessions and optimized LLM context windows.
- Proficient in Go, TypeScript, and Python; debugged, extended, and optimized AI-generated code across languages, fixing runtime errors and security gaps in 4+ production microservices.
- Established prompt engineering best practices and internal documentation; mentored team on agentic development patterns to reduce hallucination rates and improve feature velocity.
- Wrote comprehensive unit tests (Jest/Vitest) and E2E test suites (Cypress/Playwright) for AI and human-written code, ensuring production quality and reducing regressions.

### Senior Software Engineer

#### LTIMindtree (Client: MSC Industrial, NC), Hyderabad, IN

📅 Apr 2022 – Jul 2023

- Developed Node.js backend services and Go-based tooling for B2B catalog platform handling 10M+ daily transactions; optimized SQL queries and implemented strategic indexing on product tables.
- Improved API response times by 40
- Built React/TypeScript frontend components with responsive design, REST API integration, and secure OAuth/OIDC authentication flows; created reusable component libraries aligned with design systems.
- Implemented end-to-end CI/CD pipelines (GitHub Actions) with Docker containerization, automated testing, and Git feature branching; designed reusable Terraform modules for VPC, ECS, and S3/CDN infrastructure.
- Maintained PostgreSQL and NoSQL datastores, implemented Redis caching layers, and managed S3 media storage with CDN integration for multi-region product catalog delivery.
- Led modernization efforts refactoring legacy code to ES6/TypeScript standards; improved API documentation, established testing practices, and reduced production incidents by 35

## OVERVIEW

Senior Software Engineer with 8+ years of experience building high-performance web/mobile systems. Expert in full-stack dev, test engineering, and CI/CD.

## TECHNICAL SKILLS

JavaScript (ES6/ES7) TypeScript  
Node.js Go Python  
React Vue  
CMS (Strapi/Contentful/Directus)  
PostgreSQL MySQL NoSQL SQL  
Redis / ElastiCache S3 / Cloud Storage  
AWS Docker Kubernetes ECS  
CI/CD Git Terraform CDN  
Logging / Monitoring  
AI (Codex / Claude)  
backend frontend cloud computing  
content development database  
fullstack refactoring  
web development

## CERTIFICATIONS

ASTQB Certified Tester –  
Foundation Level

ISTQB

📅 Jan 2025

Backend Development and API

FreeCodeCamp

📅 2024

Python Coding (10 Apps)

Udemy

📅 2020

PowerShell & Shell Scripting

Online

📅 2019

# EXPERIENCE

---

## Senior Software Engineer

**LTIMindtree (Client: Bekaert), Hyderabad, IN**

📅 Jun 2021 – Mar 2022

- Led platform engineering for telemetry ingestion and content pipeline systems; built scalable stream processing services in Node.js and Python handling 500K+ events/day with Celery worker pools and RabbitMQ.
- Deployed containerized microservices to Kubernetes clusters with Docker; implemented multi-region deployments for high availability and disaster recovery capabilities.
- Improved production observability through centralized ELK logging, Prometheus metrics, and alerting; reduced incident response time by 45
- Built React/TypeScript frontend components with responsive design, REST API integration, and secure JWT/OAuth authentication; maintained PostgreSQL, MongoDB datastores with S3/CloudFront media delivery.
- Implemented comprehensive schema validation and ingestion error detection tooling; tuned time-series database retention policies and storage tiering, reducing infrastructure costs by 35
- Established and promoted unit and E2E testing practices; automated CI/CD deployment pipelines with GitHub Actions; led code refactors to improve maintainability, testability, and cross-environment consistency.

---

## Software Engineer

**HCL Technologies (Client: Procter & Gamble), Chennai, IN**

📅 Dec 2017 – Jun 2021

- Built scalable backend APIs in Node.js and Python (Flask) handling supply-chain operations; developed React/TypeScript frontend components with REST API integration and OAuth/OIDC authentication flows.
- Optimized database queries and implemented Redis caching layers for high-traffic product catalog endpoints; reduced database query time by 50
- Introduced Docker containerization and containerized development environments; established CI/CD pipelines (Jenkins) for feature branches with automated unit and integration testing.
- Integrated CMS platforms (Strapi/Contentful) and CDN media delivery optimization for product pages; implemented SQL-driven reporting dashboards for operational analytics.
- Implemented comprehensive monitoring, centralized logging, and alerting for production systems; reduced incident detection time and improved mean-time-to-recovery (MTTR) through better observability.
- Led code modernization efforts refactoring legacy JavaScript to ES6/TypeScript standards; extracted reusable microservices, improved API design documentation, and enhanced developer onboarding efficiency.

# PROJECTS

---

## Instagram Clone & Test Automation

**Vercel / GitHub**

- Full-stack clone with Selenium, Jest, and Cucumber suite.
- Cross-platform validation via SauceLabs.

---

## ScrollEase Onboarding Portal

**React Native & Expo**

- Vertical carousel onboarding with custom dependency patching.

# LANGUAGES

---

English (Fluent)

Hindi

Telugu (Native)



# EDUCATION

---

## B.Tech in Computer Science

**JNTU (GNITS), Hyderabad**

📅 2013 – 2017

- GPA: 7.00/10.0

# COURSEWORK

---

- Web App & Mobile App Dev
- DS, Algorithms & OS
- Cloud Computing & Security
- IT Program Management

# EXTRA-CURRICULAR

---

## Web Team Lead

**University Tech Fest**

📅 Aug 2016 – May 2017