

# Gowtham Kumar Solleti

Software Engineer, Profile

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## Professional Summary

Results-oriented Software Engineer (M.S. CS '24, Binghamton) with 2+ years building Java/Python/Go micro-services on AWS & GCP. Scales distributed systems to 500 K MAU, ships TDD-driven code through CI/CD, and leverages open-source stacks currently deep-diving Google ADK, contributing AI-agent features. Passionate about innovation and continuous learning.

## Technical Proficiencies

**Programming Languages:** Go, Java 17, Python 3, JavaScript/TypeScript, SQL, Shell/Bash, HTML5/CSS3

**Front-End:** React/Next.js, React Native, ES2023, Redux/Zustand, Tailwind CSS, Jest, Web Vitals optimization

**Back-End:** Spring Boot, FastAPI, Flask, Node.js/Express, GraphQL, REST, gRPC, Kafka, OpenAPI/Swagger, Web3.JS

**Cloud & DevOps:** AWS (EKS, EC2, Lambda, S3, DynamoDB), GCP (GKE, Cloud Run, Pub/Sub), Docker, Kubernetes, Terraform,

GitHub Actions/Cloud Build, blue-green & canary deploys, Prometheus, Grafana, OpenTelemetry, SLO/SLA definition

**Data Stores & Caching:** PostgreSQL, MySQL, DynamoDB, MongoDB Atlas, Redis, Amazon ElastiCache, S3 + Parquet data lakes

**Testing & Quality:** TDD/BDD, JUnit, pytest, basic static analysis, integration testing, SonarQube static analysis (basics), k6 load testing

**Security & Privacy:** JWT, OAuth 2.0/OIDC, AWS KMS, HashiCorp Vault, AWS Cognito

**Data & ML Exposure:** Pandas, NumPy, Vertex AI, OpenAI API, Google ADK, RAG, ReAct, LLM's, Agentic AI

**System Design Strengths & Culture:** Event-driven architectures, CAP trade-offs, SAGA transactions, caching & sharding, global multi-region failover, Agile/Scrum facilitation, design-doc authoring, rigorous code review, open-source contributions

## Professional Experience

MealMatch AI, Miami, FL

Dec 2024 — Present

Founding Software Engineer

- Architected 15 Go/Python micro-services on GKE with gRPC & Pub/Sub, scaling to 500 K MAU, 3 K RPS and 99.9 % uptime.
- Designed onboarding + payments gateway (Stripe, SAGA pattern) that cut checkout latency 40 % and raised conversion.
- Built distributed scrape pipeline (Selenium, Scrapy, Cloud Run) indexing 220 K recipes and serving GraphQL queries in <150 ms p95.
- Engineered budgeting engine with Firestore triggers & Vertex AI forecasts, lowering grocery spend 25 % for pilot users.
- Shipped pantry-monitoring feature using Vision API & Cloud Functions, trimming food waste 30 % and lifting DAU 18 %.
- Implemented OpenTelemetry traces + Prometheus metrics, driving MTTR to <2 min and preventing three Sev-2 outages.
- Automated Terraform IaC & Cloud Build CI/CD; spin-up of prod-parity environments now <10 min with mTLS secrets.
- Released React Native app via Fastlane + Firebase App Distribution, enabling bi-weekly blue-green deployments with Detox e2e tests.

Lecherro, Binghamton, NY

Dec 2023 — Present

Co-founder & Software Engineer

- Architected an event-driven micro-service platform (Python / FastAPI, AWS EKS, PostgreSQL) that ingests IoT milk-test meter data and serves nutrition-traceability APIs in < 200 ms p95.
- Shipped React Native retailer & consumer apps with QR-scan nutrition labels, cutting first-run onboarding time 30% and reaching 2K beta installs in 90 days.
- Automated label-render pipeline (Pandas → S3 → Lambda) to generate bottle-specific fat/protein badges, eliminating 75% of manual data entry at bottling plants.
- Implemented a demand/quality dynamic-pricing micro-service (Go + Stripe) that lifted repeat purchases 25% across two pilot apartment complexes.
- Deployed GitHub Actions→Terraform CI/CD with blue-green rollouts, shrinking rollback time 20 → < 3 min while holding 99.9 % uptime.
- Instrumented OpenTelemetry traces and Grafana RED dashboards, uncovering two latency regressions pre-launch and preventing Sev-2 incidents.
- Ran LaunchDarkly A/B tests on delivery cadence and UI copy, speeding feature-validation loops 35% and informing MVP pivots.
- Produced architecture docs, security threat models, and \$2B TAM analysis for VC diligence, supporting term-sheet negotiations with two investors.

Information Data Systems Inc, Binghamton, NY

Dec 2023 — Dec 2024

Software Engineer

- Architected a Hedera-based smart-contract backend in Solidity, handling 100 K+ daily txns at < 300 ms p95 across five regions.
- Containerized & deployed Go/Python micro-services on AWS EKS with ALB-gated gRPC/REST endpoints and zero-downtime blue-green rollouts.
- Orchestrated auto-scaling, multi-AZ clusters via Terraform + Helm, sustaining 99.9 % uptime under burst traffic.
- Hardened secrets management by integrating HashiCorp Vault with AWS KMS and mTLS, enforcing least-privilege key rotation.
- Led a four-engineer Scrum squad, authoring design docs and driving cross-team code reviews to uphold SLA and security posture.
- Automated GitHub→CodePipeline canary pipeline, enabling on-demand prod promos + one-click rollback.
- Developed a React/Next.js career portal with LinkedIn & Indeed APIs, boosting candidate engagement 30 % while eliminating manual postings.
- Delivered a WebSocket-driven HR analytics dashboard (DynamoDB Streams, Lambda), giving recruiters live funnel insights and shortening hiring cycles.

Tavant Technologies, Bengaluru, India

Aug 2021 — July 2022

Junior Software Engineer

- Engineered an AI-driven marketing pipeline with SageMaker & Kinesis, boosting user engagement 15 % across three product lines.
- Developed a React + FastAPI contract-pricing app on AWS Lambda/S3, sustaining 5 K concurrent sessions at 99.9 % availability.
- Optimized ETL of 2 M+ records via Pandas vectorization and Parquet, cutting preprocessing time 40 % and unblocking nightly retrains.
- Trained a Random-Forest model (10 GB dataset) achieving 95 % accuracy and driving a 25 % revenue uplift through dynamic pricing.
- Containerized micro-services with Docker & ECS Fargate; codified infra in Terraform for repeatable prod-parity environments.
- Instituted CloudWatch/X-Ray tracing and automated backups, shrinking MTTR to < 5 min and hardening disaster-recovery posture.
- Established PyTest/Cypress suites and GitHub Actions CI/CD, moving the team from monthly to weekly secure releases.
- Collaborated with data-science & PM pods under Scrum, authoring design docs and presenting architecture trade-offs to leadership.

## Education

### Master of Science – Computer Science

Binghamton University, Binghamton, NY, Aug 2022 – May 2024

**Coursework:** Database Systems, Cloud Computing, Data Mining, Computer Security, Data Structures & Algorithms, Operating systems, Programming Languages (Scheme, Prolog, Haskell), design patterns, Computer Architecture, Software Project Management

### Bachelor of Technology – Computer Science and Engineering

Visvesvaraya Technological University, Bangalore, India, 2018 – 2022

## Key Projects

### Open-Source AI Agents (Google ADK) (Present)

- Contributed to Google’s Agent Development Kit (ADK) open-source project, developing AI agent modules and improvements. Built a multi-agent system prototype using ADK to orchestrate LLM-powered agents with memory and tool usage, demonstrating advanced AI integration into applications.

### WanderWise, Nov 2024 — Present

- Architected a next-generation travel platform using Python, and OpenAI APIs, implementing RAG and ReAct to deliver personalized itineraries, improving user engagement by 20% and ensuring accurate recommendations.
- Integrated AI workflows, AI agents, and REST APIs to enhance trip-planning efficiency, enabling dynamic decision-making, real-time itinerary optimization, and external partner integrations for 15% cost reductions.

### E-Voting Decentralized application on AWS, Oct 2023 – May 2024

- Built a blockchain-based voting system with Solidity, Java, and AWS, using cryptographic algorithms for tamper-proof elections.
- Developed REST APIs and PostgreSQL databases for secure user authentication, ensuring scalability and reliability.

## Certifications

- AWS Certified Associate Developer - AWS
- Terraform Certification - Udemy