Gowtham Sundaralingam

Los Angeles, CA || gowthamraagul@gmail.com || https://www.linkedin.com/in/gowtham-sundar-519143147

EDUCATION

Texas A&M University, College Station, TX — B.S. Applied Mathematics & Computer Science AUG 2017 - MAY 2021

EXPERIENCE

Shameless Tourist | Remote (Part-Time) — *AI ENGINEER & Architect*

AUG 2025 - PRESENT

A luxury travel planning company. I'm responsible for creating and architecting a company wide AI multi-agentic system to automate many tasks. I craft a combination of MCP tools alongside Supervised Fine-tuning (SFT) and Reinforcement Learning Fine-Tuning (RLFT) techniques to decrease token cost by 80% and decrease inference time by 50%.

Local Models Used: Llama 3.3, Qwen3, DeepSeekR1

Agentic Frameworks: LangGraph, LangChain, Agno, DsPy

RL Fine-Tuning Frameworks: UnSloth, Huggingface

MCP frameworks: FastMCP

Orchestration: Ray Serve, Ray Framework, Kubernetes

Career Break to learn Reinforcement Learning in AI

AUG 2025 - PRESENT

PropertyGauge | Latham, NY — Software Engineer & Cloud Architect

NOV 2023 - JUL 2025

A Real Estate Tech company which manages and aggregates real-estate properties. My responsibilities are to architect, engineer, and fully manage all of the infrastructure on the MERN stack.

Backend(Rest APIs): Golang + SQLC + Chi Router + MongoDB, GraphQL + PostgreSQL, Redis

Data Engineering: Apache Beam, BigQuery, Amazon Redshift, S3 Batching, Kafka, AWS SQS, Distributed Cronjobs

Testing: Cypress, Jenkins

DEV/OPS: Github Actions CI/CD, ArgoCD, Prometheus, Grafana, OpenTelemetry, Helm, KubeOps viewer, Terraform, Datadog, Crossplane, Cronjobs, Traefik Ingress, AWS Ingress, Traefik Mesh, Jaeger, Docker, Grafana Tempo

Workloads: Kubernetes ADMIN (EKS EC2, EKS Fargate, Elastic File System (EFS), EBS, RDS, GKE, AWS WAF, Route 53, ALB/NLB, Security Groups, S3, Lambda, SNS, EKS

Cloud: GCP, AWS

Databases: MongoDB, PostgreSQL, RabbitMQ, RedPanda

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TrustMachines | NYC, NY — Backend & DevOps Engineer // Core Engineering Team FEB 2024 - JUN 2024

The blockchain company behind Stacks Coin, the L2 Layer of Smart Contracts on Bitcoin. It raised 150M and is the premier player in the Bitcoin space.

Backend(Rest APIs): Rust

Testing: Cypress, Jenkins, Blue Green Testing

DEV/OPS: Terraform, AWS CDK, Github Actions, Custom Scripting

Workloads: EC2, Kubernetes

Cloud: AWS

Gigturbo | Los Angeles, CA — Founder / Architect / Data Engineer / SWE

APRIL 2020 - FEB 2024

A VC-funded fintech startup that allows independent workers to achieve their personal and financial goals. My responsibilities are to architect, engineer, and fully manage all of our infrastructure, products, engineers and data scientists. I am also responsible for our business planning. Official: https://gigturbo.com

Frontend: React + Typescript + Next.js (SSR)

Backend(Rest APIs): Springboot + JDBC + JPA + GraphQL + PostgreSQL + Kafka + Redis + DGraph || Python + Flask || Rust + Tokyo + Diesel, MongoDB (NoSQL), Google Datastore (NoSQL)

Data Engineering: Apache Beam, BigQuery

ML/AI: FAISS + NLP T5 Transformer + Finetuning on GPT-3, Generative Text Models

DEV/OPS: Github Actions CI/CD, ArgoCD, Prometheus, Grafana, OpenTelemetry, Helm, Bytebase, KubeOps viewer, Terraform

Workloads: Kubernetes ADMIN (EKS EC2, EKS Fargate, Elastic File System (EFS), EBS, RDS, GKE, AWS WAF, Route 53, ALB/NLB, Security Groups, S3, Lambda, SNS

Cloud: GCP, AWS

Databases: MongoDB, PostgreSQL, MySQL, Firestore, DGraph, ElasticSearch (ELK), DynamoDB

ThoughtSpace | College Station, TX — Senior SWE

MAR 2018 - OCT 2019

A startup that allows enterprise clients to be able to hire college students to work alongside engineers and build experience. It matchmakes companies with students through AI. I was the chief architect and engineer of the platform. Official: https://www.mvthoughtspace.com.

FTD | Downers Drove, IL − *SWE*

JUN 2018 - AUG 2018

Lead the NLP Team to allow customers to be able to order inventory all through voice.

Backend: Node.js + Dialogflow + Express + Google Assistant.

Particle Physics Internship (Quarknet/Fermilab) || Northern Illinois University — Research Intern Summer 2016

An internship that helped to build more compact muon detectors. Also investigated areas in Fermilab near the particle accelerators and built experience in quantum systems engineering. Used Scikitlearn framework in Python to find predictions of muon hits using the data from muon detectors

SKILLS

Mathematics: Abstract Algebra, Topology, Differential Geometry, (some Number theory), Advanced Calculus, Numerical Methods

Blockchain Mathematics: State Replication Machines (SRM), Byzantine Broadcast, Dolev Strong Protocol, FLP, CAP Theorem, Sync/Async/Partially-Sync Consensus Models

Algorithms Theory: Functional Analysis, Languages & Automata (DFA, NFA, Turing Machines, NP-Hard, NP, P, NP-Complete, Chomsky Language Theory, Halting Problem etc.), Compilers, Max Flow, Bipartite Graphs, Blossom Algorithm, Scheduling, Simplex, Arborescence, Optimality Proofs etc.

Languages: Javascript, Java, Typescript, Python, C++, Kotlin, Rust

Frameworks: Node.js, Next.js, React.js, Angular, Tensorflow, Blender, Dialogflow, Numpy, Sklearn

Technologies: PostgreSQL, MongoDB, Redis, JDBC, JPA, SpringBoot, Docker, Express, Django, FAISS, AI Transformers (BERT, T5), GPT-3, Kubernetes, GraphQL, Selenium WebDriver

Other: Firebase, Google Cloud, AWS, REST, OpenCV, Flask

Architecture: Cloud Architect, Infrastructure Architect, Google Cloud Certified Data Engineer

Data Engineering: Apache Beam, BigQuery