

SUYASH SINGH

☎ (+91) 8604960115 | ✉ suyashs787@gmail.com | 🔗 linkedin.com/in/suyashin | 🌐 github.com/anothercodingguy

EDUCATION

Manipal Institute of Technology

B.Tech in Computer Science Engineering (Data Science)

Expected Graduation: 2027

Bengaluru, India

- **CGPA:** 8.51/10 | **Relevant Coursework:** Distributed Systems, Object-Oriented Design (OOD), Operating Systems (Concurrency, Networking), Data Structures & Algorithms, Database Management Systems.

TECHNICAL SKILLS

Languages: Python, TypeScript, C++, JavaScript, Go, SQL, Bash / Shell Scripting

Distributed Systems & Messaging: Event-Driven Architecture, Redis Pub/Sub, BullMQ, Message Queues, Webhooks, RESTful APIs, Microservices

Cloud & Infrastructure: AWS (EC2, S3, Lambda), Docker, Kubernetes, Linux/Unix Internals, Redis, PostgreSQL, Git, CI/CD

Frameworks & Observability: FastAPI, Node.js, Next.js, OpenTelemetry, Prometheus Concepts, Structured Logging, Execution Tracing

Testing & Reliability: Test-Driven Development (TDD), Unit & Integration Testing, PyTest, Jest, Load Testing, Circuit Breakers

Problem Solving: LeetCode (200+ Solved) | CodeChef 3* (Data Structures, Concurrency & Graph Algorithms)

WORK EXPERIENCE

Omnisavant

Sept. 2026 – Dec. 2026

Software Development Intern

Remote

- Engineered asynchronous data pipelines and distributed backend services, optimizing concurrent request handling and reducing processing latency by **35%** across high-throughput client workloads.
- Architected comprehensive integration and unit test suites using **PyTest**, validating boundary edge cases, service idempotency, and eliminating unhandled runtime pipeline exceptions.

Turing

Dec. 2025 – May 2026

AI Intern

Bengaluru, India

- Architected high-throughput RESTful services and asynchronous worker pipelines on **AWS**, managing concurrent network requests and high-volume data payloads with automated serialization.
- Implemented resilient service routing with circuit breakers, rate limiting, and exponential retry policies, sustaining **99.9% uptime** while emitting structured OpenTelemetry execution traces.

TECHNICAL PROJECTS

ReachInbox High-Concurrency Distributed Task Engine

TypeScript, Node.js, Redis, BullMQ, PostgreSQL, Jest

- **Distributed Queue Processing:** Engineered an asynchronous task execution engine utilizing **Redis** and **BullMQ**, implementing dead-letter queues, backpressure management, and idempotent message handling.
- **Test-Driven Reliability:** Built automated integration and unit test suites in **Jest**, enforcing strict relational transaction boundaries and eliminating message duplication under peak concurrency.

PathFlow Distributed Systems Observability & Profiling Platform

Python, TypeScript, OpenTelemetry, Next.js, Prisma, PostgreSQL

- **Distributed Tracing & Diagnostics:** Built an end-to-end tracing system using **OpenTelemetry** to profile cross-service latency bottlenecks, call trees, and downstream network failures in real time.
- **Root-Cause Telemetry Engine:** Implemented automated dependency graph analysis, isolating microservice regressions and reducing mean-time-to-debug (MTTD) by **40%**.

High-Throughput Routing Proxy & Caching Engine

FastAPI, Redis, Docker, RESTful APIs, Qdrant

- **Low-Latency In-Memory Caching:** Built an asynchronous routing proxy leveraging **FastAPI** and **Redis**, implementing caching strategies and request deduplication to cut p99 latencies to **under 50ms**.
- **Traffic Routing & Resiliency:** Enforced dynamic routing, schema validation, and automated failover policies across heterogeneous downstream endpoints to maximize system uptime.

Self-Erasing Neural Networks (SENNS) Research Publication, IEEE ICDDs 2025

Python, PyTorch, Algorithms, System Profiling

- **Algorithmic Optimization:** Co-authored peer-reviewed research accepted at IEEE ICDDs 2025, designing graph-traversal pruning algorithms for efficient selective parameter deletion in neural models.
- **Benchmarking Test Harnesses:** Built automated profiling test harnesses measuring memory utilization, compute complexity, and degradation bounds across large-scale model architectures.

POSITIONS OF RESPONSIBILITY

Manipal Bengaluru Open-Source Community (MBOSC)

2024 – 2025

Project Head

- Mentored **200+ student developers** across open-source projects, Git workflows, and CI/CD pipelines, enforcing testing standards and leading weekly architectural code reviews.

Codex (Competitive Programming Club)

2025

Project Head

- Organized algorithmic problem-solving workshops for **100+ members**, designing automated unit test cases, benchmarking runners, and evaluating optimal runtime solutions.