# Shreyas Gupta

Linkedin: linkedin.com/in/sggts04 Github: github.com/sggts04

#### EDUCATION

Indian Institute of Information Technology, Allahabad

Bachelor of Technology - Information Technology; GPA: 8.93

#### EXPERIENCE

### • Sprinklr

- Senior Product Engineer Backend
  - \* Led the **distributed architecture refactor** of our call-routing engine:
    - Redesigned a master-slave architecture to a **Redis**-backed **distributed system**, with **Zookeeper** for distributed locking to ensure correctness.
    - · Achieved horizontal scalability resulting in over 40% infra cost reduction for the engine.
    - Reduced critical service downtimes to zero, severely improving on fault tolerance and high availability.
    - · Ensured careful balance of high availability, reliability, correctness, and speed

### • Product Engineer - Backend

- \* Refactored a continuously running voice call router into an event-driven model, improving CPU utilization of the call-routing engine by up to 33%.
- \* Benchmarked multiple deep-cloning libraries for speed, accuracy, and CPU usage, and created a custom deep-cloning utility that improved performance by 6-8x for mission-critical workloads.
- \* Designed and implemented a base-level interceptor to simulate service outages (e.g. Elasticsearch outage, Redis outage, etc) in a microservice, effectively measuring and helping reduce the blast radius across various modules to make the system more **fault tolerant**.
- \* Developed a Kafka-powered monitoring framework for our call-routing engine, aggregating real-time performance and operational metrics plotted through Kibana dashboards, helping minimizing downtime through faster issue identification.
- \* Eliminated Elasticsearch dependency from a mission-critical workflow by implementing asynchronous data sync and Kafka-based retries, reducing the impact of Elasticsearch outages on critical flows.

#### • Product Engineer Intern - Backend

- \* Wrote a **Spring Boot** service to fetch and analyze historical case routing state of a customer care agent. Worked with MongoDB and Elastic Search.
- \* Wrote a Spring Boot service to automate testing for chatbots. Worked with MQTT protocol for communication with the bot.

### • Logward

- Backend Developer Intern
  - \* Wrote a **monitoring engine** to monitor mission critical data pipelines helping find points of failure faster and automating retries.
  - \* Wrote the micro-service in **Typescript** and also wrote **.NET** and **Python libraries** to integrate with services involved in pipeline. Worked with many AWS services like SQS and S3. Also had exposure to Kubernetes.

#### SKILLS SUMMARY

- Languages: Java (Spring Boot), Python, Node.js (ExpressJS), JavaScript / TypeScript, C++, SQL
- DBs and Tools: MongoDB, Redis, Kafka, Elastic Search, MySQL, Git
- Cloud/Infra: Kubernetes, Docker

### Projects

# PuzzleDash

- https://puzzledash.shreyasgupta.in
  - A chess minigame where you solve a series of chess puzzles with increasing difficulty in limited time.
  - Hosts 50+ monthly active users.
  - Worked with Socket.io for **realtime communication** and Node.js for the backend server.

# Impedia

# https://impedia.shreyasgupta.in

- Co-authored the backend of Impedia, a platform to effectively communicate grievances or requests within your organization.
- Onboarded 4 organizations with a total of 100+ users in the prototype stage.
- Developed using Nodejs(Express) with MongoDB. Implemented authentication using JWTs for multiple user types.

Gurugram, Haryana May 2025 - Present

Jan 2023 - Apr 2025

Prayagraj, India

Jan 2022

May 2021 - July 2021

July 2019 - June 2023

May 2022 - July 2022

Remote

April 2023