Sourabh Rajdev

Professional Summary

I'm a software engineer who enjoys designing systems, writing clean code, and solving practical problems. I've worked on everything from automation scripts to production-grade services, and I like understanding how things work at every layer of the stack. I'm especially drawn to building tools that are fast, dependable, and easy for others to use and improve.

Education

Vellore Institute of Technology

Expected Jul 2026

B. Tech in Computer Science and Engineering

Bhopal, India

• Relevant Coursework: Advanced Algorithms, Operating Systems, Distributed Computing, Cloud Infrastructure, ML, Data Engineering

Experience

TERI – The Energy and Resources Institute

May 2025 - Present

Data Science Intern

New Delhi, India

- Developed production-grade ETL pipelines using Python, SQL, and SparkSQL, supporting analytics for 10+ teams.
- Enabled a 70% recycling rate increase across 5 cities by building data dashboards for policy recommendations.
- Designed BI dashboards using Tableau, Power BI, and Seaborn to translate trends for non-technical audiences.

Outlier (Remote)

Dec 2024 – Feb 2025 San Francisco, USA

Machine Learning Intern

• Built an adversarial test suite with 50+ edge-case prompts for multilingual NLP model benchmarking.

• Patched vulnerabilities in inference logic by contributing to core Python codebase; improved fail rate on test set by 30%.

• Fatched vulnerabilities in inherence logic by contributing to core rython codebase, improved fan fate on test set by 50%.

HiAiDo

Nov 2023

Software Engineering Intern

Nov 2023 – Mar 2024 Chennai, India

- Created automation tools to parse and extract AWS documentation, reducing dev onboarding time by 40%.
- Architected serverless ETL flow with AWS Lambda and S3 for real-time analytics ingestion.
- Improved pipeline observability by integrating CloudWatch logs and error alerts.

Projects

Personal Portfolio Website [Live]

2024

Frontend & DevOps Project

Bhopal, India

- Built a responsive, framework-free SPA using vanilla JS and CSS3; scored 98+ on Lighthouse.
- Modularized codebase with reusable components and BEM-style CSS structure.

• Automated deployment using **Netlify CI/CD**, achieving <60s production pipeline.

Distributed Task Queue System

2023

Backend Infrastructure Project

Bhopal, India

- Built an async background processing engine in Java using Redis queues and multi-worker architecture.
- Implemented exponential backoff retries, job persistence, and failure logging.
- Designed REST endpoints for job creation, updates, and monitoring.

Technical Skills

- Languages: Java, Python, C++, SQL, JavaScript (ES6)
- Cloud & DevOps: AWS (Lambda, EC2, S3, RDS, CloudWatch), Docker, Git, Netlify CI/CD
- Backend: REST APIs, Spring Boot, Microservices, Redis, Distributed Systems

Technical Writing

Video Director

- Monolith to Microservices migrating legacy infra into scalable services using AWS.
- The Art of Latency reducing model response times in production NLP systems.
- ETL Pipelines That Matter scalable Spark workflows for real-world data ops.

Leadership & Activities

Photography & Video Club, VIT

2023 - Present

Bhopal, India

- Led 70+ shoots, managing schedules, teams, and visual storytelling workflows.
- Mentored 12 juniors on editing, production, and creative direction.
- Managed equipment inventory, budgeting, and inter-departmental coordination.
- Organized training sessions for video post-production and team management.