

RUDRA NARAYAN SAHOO

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👤 Portfolio

LinkedIn

GitHub

LeetCode

WORK EXPERIENCE

MultiLipi

Backend Developer Intern

Aug 2025 – Present

Remote

- Resolved over **80%** of **logged errors** within the first two months, stabilizing the system and clearing a long-standing technical backlog.
- Implemented a dynamic **AIO (AI Optimization)** layer to serve **llms.txt manifests**, optimize **Markdown content** and **Schema.org** for translated subdomains improving AI crawler discoverability.
- Implemented additional security checks at the load balancer level to block suspicious API traffic originating from tools such as **cURL** and **Python requests**.
- Built an intelligent **HTML parsing engine** that extracts user-visible content and groups it to provide accurate translation context without increasing translation costs.

TECHNICAL SKILLS

Languages: C++, Python, JavaScript, SQL

Frameworks: Django, Django REST Framework, FastAPI, React.js

Databases: MongoDB, MySQL, PostgreSQL, Redis

DevOps & Cloud: AWS, Docker, GitHub Actions, Kubernetes(basic)

Developer Tools: Git, GitHub, Linux, Postman, VS Code

Soft Skills: Communication, Technical Mentoring

PROJECTS

Fourio | Python, FastAPI, Typer, MongoDB, NumPy, FFmpeg, DSP

🔗 github

- Engineered a **CLI-based music recognition system** using Python and FastAPI, implementing a custom **Shazam-like algorithm** to process and index audio streams from Spotify and YouTube ingestion pipelines.
- Optimized the **Short-Time Fourier Transform** pipeline using **NumPy vectorization** and multiprocessing, reducing track analysis time from **200+** seconds to under **20 seconds** (90%+ speedup).
- Designed a high-throughput storage strategy using **MongoDB bulk operations**, enabling the stable upsert of **70k+** unique **fingerprint hashes** per track while resolving multi-process write contention.

Master Of Keys | Django, React, PostgreSQL, Redis, Celery

🔗 github

- Designed and built a multiplayer typing platform and let users track their progress.
- Implemented secure user flows with **JWT-based authentication** and email verification.
- Integrated **Redis caching** at application and URL level to improve response time.
- Used Celery for **async background tasks** such as **email notifications** and stats calculations.
- Optimized database queries and aggregation, improving performance under peak load.

ACHIEVEMENTS

- Achieved the **Knight** badge on LeetCode with a peak rating of **1872**.
- Ranked **763** globally in a LeetCode contest out of **27,000+** participants.
- Solved over **1100+** **problems**, ranking in the **top 5% globally** on LeetCode.
- Recognized as a **National semi-finalist** in the Flipkart GRiD 7.0 competition.

KEY COURSES TAKEN

Core CSE: Data Structures, Algorithms, OOPs, Computer Networks, Operating Systems, DBMS

EDUCATION

Silicon University

Nov 2022 - May 2026

B.Tech in Computer Science and Engineering - **CGPA: 9.34**

Bhubaneswar, India

POSITION OF RESPONSIBILITY

Silicon Wing of Innovation and Technical Coding Hub (SWITCH)

Aug 2023 - Present

Problem Setter | Event Coordinator

- Co-organized Multiple competitive programming contests.
- Mentored and conducted peer-learning sessions, positively impacting more than **50+** students.