Sarthak Rangari

Email: sarthakrangari788@gmail.com LinkedIn: linkedin.com/sarthak-rangari-03a078229 Mobile: +917219142469

Portfolio: sarthak7219.github.io

SKILLS SUMMARY

• Languages: Python, Java, C++, JavaScript, SQL

• Development: Django, React, HTML, CSS, Restful APIs

Docker, Kubernetes, Jenkins, AWS, CI/CD, Git, GitHub, MySQL, PostgreSQL, MongoDB

• Other: Data Structures and Algorithms, Figma, UI/UX Design

• Soft Skills: Strong communication & interpersonal skills, Leadership, Flexibility, Teamwork, Active Listener, Time Management, Problem-Solving & Debugging, Decision Making, Cooperation.

EXPERIENCE

Full Stack Developer Intern (URL)

Roorkee, Uttarakhand

Nagpur, Maharashtra

Department of Architecture and Planning, IIT Roorkee

May 2024 - July 2024

- Built the website for the APN project "GOAL" using React, HTML, CSS, and JavaScript to showcase project's activities, case studies, and workshops.
- Created RESTful APIs with django-rest-framework and MySQL, deploying the backend on AWS EC2 and the frontend on **Vercel**.
- Crafted over 10 user interfaces and prototypes for the website using Figma.
- Optimized website performance by improving load times by 30% through image and query optimization, reducing HTTP requests and enabling browser caching using Redis.

Projects

• Automated Amazon Data Scraper Using Selenium (URL)

- o Developed a Selenium-based web scraping tool to extract product details (names, prices, reviews) from Amazon.
- Automated browser interactions using Selenium WebDriver and XPath for data extraction.
- Extracted data from 100+ web pages with increased efficiency.
- Utilized **Pandas** to structure scraped data and export it to an **Excel** file for analysis.

• File Deduplication System Using Python (URL)

- Designed a Python-based storage optimization system to reduce data redundancy by 60-80%.
- Broke files into 4KB data blocks, hashed them, and stored only unique blocks in the database.
- Achieved up to 90% storage reduction for highly redundant text data sets using inline block-level deduplication.
- Implemented SHA-256 for hashing each 4KB block and used MySQL for efficient storage.
- Built a **Django**-based web interface for file uploads, real-time storage **metrics tracking**, and efficient file reconstruction.

Weelink - Social Media Platform (URL)

- o Created a responsive and user-friendly social media platform with HTML, Tailwind CSS, JavaScript, Django and PostgreSQL.
- o Integrated features like Post, Share, Like, Comments and customizable profiles.
- Implemented real-time messaging using **Django channels** and **WebSocket**, along with secure user authentication.
- Deployed the platform on AWS EC2 with Docker, Kubernetes, and a Jenkins-powered CI/CD pipeline.

• Tribal Development Index Calculator (URL)

- o Developed a web tool to calculate the Tribal Development Index (TDI) for Jharkhand's tribal communities using Django, MySQL, HTML, CSS, and JavaScript.
- o Processed a survey dataset of more than 5000 entries with Pandas, improved the calculation speed by 30% and reduced the data **processing time** by **50%**.
- o Generated interactive visualizations with Chart.js and deployed the tool on an AWS EC2 instance for scalability and performance.

EDUCATION

Indian Institute of Technology (IIT) Roorkee

Bachelor of Technology (BTech) - Mechanical Engineering

Uttarakhand, India Nov 2021 - May 2025

CERTIFICATIONS

• Communication Skills For Success (Udemy) - Certificate Link

HIGHLIGHTS

- Achieved AIR 25,216 in JEE Advanced 2021, standing out among over 150,000 candidates.
- Secured 1st place in the Solo Singing category at the IITR's General Championship 2024.
- Worked as a Executive member at Cognizance, IIT Roorkee in the video editing vertical