Chetan Kumar

Education

Chhattisgarh Swami Vivekananda Technical University 2020 - 2024

B.Tech. in Computer Science and Technology |

Experience

IIT Bhilai Jan 2025 - Present

Research and Development Intern

Machine Learning, Time Series, ReactJS, Python

- Currently doing research and development at **IIT Bhilai** on time-series analysis for cobble detection in the **Bhilai Steel Plant**, the largest steel plant in India.
- Implementing applied machine learning techniques for real-time anomaly detection in steel manufacturing processes.
- Developing models for **detecting and preventing failures and cobbles**, ensuring smooth operations in the production line.
- Performing data analysis using Grafana, Pandas, and NumPy to visualize and interpret sensor data.
- Developed an alarm monitoring system using Flask and ReactJS for real-time alerts and issue tracking.

Prodigal Al Feb 2024 - Apr 2024

Frontend Intern

JavaScript, ReactJS, NodeJS, CI/CD, HTML, Tailwind CSS, CSS, MaterialUI Git, GitHub

- Worked on Defi the web platform Enhanced client-side web application functionality by improving page load speed and optimizing images.
- · Utilized ParseHub to efficiently scrape and extract data

Parsl

Open-Source Contributor

Python, Git, CI/CD

- Contributed to a Parallel Scripting Library Parsl project under the University of Chicago
- As a contributor, I have fixed handlers that work differently in the latest version of Python, and it is not safe to use Python 3.12.
- · See my merged Pull request here

Projects

Sentimental Analysis App

Python, Numpy, Pandas, Streamlit, NLP, Machine Learning

- Developed an interactive sentiment analysis application that allows users to **upload their own datasets**, analyze sentiment, and view results in **real time**.
- Integrated a file upload feature enabling users to input custom review data.
- Live link

Text Analysis App

Python, Numpy, Pandas, Streamlit, NLP, Machine Learning

- A feature-rich text analysis application using Pyhton, numpy, panda, Natural language toolkit. This project has functionality like Stress detection, Spam detection, Sentiment analysis and Sarcasm detection
- The application allows users to **input any text** and accurately identifies if the text is spam, expresses a sentiment, shows signs of stress, or contains sarcasm.
- Real-time Analysis: The app performs analysis in real time, providing instant feedback on the user's input.
- Live link

Certifications

JPMorgan Software Engineering Virtual Experience

100xDevs Full Stack Open Source Cohort

Skills

Python, Machine Learning, Grafana, Postgres, SQL, ReactJS, HTML, CSS, Github, Git, Linux, Docker, Cl/CD, Problem Solving, Tailwind CSS