

PAVAN KUMAR KOKKILIGADDA

☎ 469-207-6377 ✉ pavan0417.k@gmail.com 🌐 linkedin.com/in/machaax

Education

Rutgers University-New Brunswick

Master of Science in Computer Science

January 2024 – Present

New Brunswick, New Jersey

Indian Institute of Technology, Kharagpur

B.Tech & M.Tech (Hons.) in Mining Engineering

August 2018 – May 2023

Kharagpur, West Bengal

Relevant Coursework

- Machine Learning
- CS 520 - Intro to AI
- Big Data Processing
- CS 518 - OS Design
- Probability and Statistics
- CS 512 - Intro to DSA
- Linear Algebra
- Advanced Calculus

Experience

Verzeo

Machine Learning Intern

May 2022 – June 2022

Bangalore, Karnataka

- Developed a **Theft prevention system** that alerts users of intrusion into their house/property using computer vision.
- The system distinguishes family members as safe and sends an email with captured images if an intruder is detected.
- Built **Sentiment Analysis** machine learning model using SVM and count vectorizer to classify restaurant reviews as positive or negative, achieving an accuracy of 80.2 %.

InsAnalytics

Data Analytics Intern

May 2021 – August 2021

Kolkata, West Bengal

- Implemented SEIR model (susceptible, exposed, infectious, recovered) to forecast COVID-19 cases Trends.
- Played an essential role in **collecting, cleaning, preparing** data for further analysis, and creating visualizations.
- Utilized Seaborn and Matplotlib for **data visualizations** and SciPy for **curve fitting**.

IIT Kharagpur

Teaching Assistant

August 2022 – April 2023

Kharagpur, West Bengal

- Assisted 3rd-year mining engineering students in performing ventilation laboratory experiments.
- Evaluated weekly Lab reports of 20 students and provided constructive feedback.

Projects

Food Delivery - Web Application | Personal Project - ReactJS, JavaScript



May 2022 - August 2022

- Built a responsive food delivery website that allows users to add food items to the cart and place orders.
- Developed front-end using HTML, CSS, JS, ReactJS, and Firebase as Database and deployed on Netlify.

Vibration Analysis of HydroCyclone | Masters Thesis Project - Python

January 2023 - May 2023

- Collected time-series vibration profile data from an Industrial HydroCyclone using accelerometers and a Raspberry Pi.
- Implemented **Fast Fourier Transform** Algorithm(FFT) for denoising vibration signals, achieving a 6.15 dB increase in SNR, outperforming other denoising techniques.
- Discovered a positive correlation between feed inlet pressure and vibration intensity, quantified through GRMS and RMS values, across various spigot and vortex-finder configurations of HydroCyclone.

Technical Skills

Languages: Python, C/C++, Java, JavaScript, HTML, CSS, MySQL

Tools/Frameworks: ReactJS, Git/Github

Libraries: NumPy, Pandas, Matplotlib, Seaborn, scikit-learn, SciPy

Achievements

- All India Rank 4 in All India Maths Science Talent Examination 2014-2015 - Gold Medal.
- All India Rank 429 in **GATE**-2022 Mining Engineering.
- 3-Star competitive programmer on CodeChef.