

BODA KALYAN SINGH | 23CL60R20

Indian Institute of Technology Kharagpur

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EDUCATION

Year	Degree/Exam	Institute	CGPA/Percentage
2023-25	MTech, Earth system and Science	Indian Institute of Technology Kharagpur	8.35-Ongoing
2022	Btech, Civil Engineering	JNTUH College of Engineering Manthani	6.44
2018	Class XII, TSBIE	Sri Chaitanya Junior College, Hyderabad	97.4%
2016	Class X, TSBSE	Good Shepherd School, Papaiahpet	9.7/10

PROJECTS

Covid-19Detection using Chest X-Ray Sep'23

- o Developed a **Convolution Neural Network (CNN)** model from scratch for detecting Covid-19 using chest X-Ray images
- Achieved highest accuracy of 91.14% and 98.66% on training and testing set post Data augmentation techniques
- Link to the repository is <u>here</u>

Spam Classification July'23

- Worked on SMS Spam Collection dataset which consists of 5574 messages to build a prediction model that will accurately classify which texts are spam or harm, performed steps like Preprocessing dataset, NLP based Cleaning Texts and Analysis Conclusion
- Best accuracy is accomplished with Naive Bayes model which characterizes 98% of the texts accurately
- Link to the repository is <u>here</u>

Recommendation Engine using Netflix Aug'23

- Worked on Net ix movies data set which consist of 4499 movies, implemented SVD to make a prediction model to predict the best review
 movie to suggest customers, performed steps like Data Preprocessing, Cleaning Texts, Training and Classification, Analysis Conclusion
- Created a bench mark to give the best review movie
- Link to the repository is <u>here</u>

Heart disease prediction Aug'23

- Developed a predictive model for heart disease using **Decision Tree Algorithm** to provide early diagnosis, performed **Exploratory Data Analysis** to find out the exact affecting symptom of heart disease, visualized the data set using **Matplotlib**, **seaborn** libraries
- For improving performance of Decision tree model, applied **Hyperparameter tuning** like **Gridsearchcv**, **Randomsearchcv**, got the **Accuracy of 84.6%** by performing depth up to 15
- Link to the repository is here

Census Income Oct'23

- Performed Exploratory Data Analysis on Census Income data set using matplotlib, pandas and seaborn, Implemented Model building with Logistic Regression, Decision Tree and Randomforest
- Achieved highest accuracy of 83.99% using Random Forest Classifier
- Link to the repository is here

COURSE WORK INFORMATION

- Advanced Certification in Data Science and Artificial Intelligence (Data Science, Machine Learning, Artificial intelligence, Power BI, GIT)- CODE IIT MADRAS, Mar'23-Ongoing
- The Complete Data Structures and Algorithms in Python Nov'23
- Python Programming Masterclass- June 23
- Introduction to Natural language Processing, Oct'23
- Introduction to R- Mar'23
- Data Analysis with R programming, Dec'23

SKILLS AND EXPERTISE

- o Programming Languages: Python, R, Basic C, MATLAB, SQL
- o Frameworks and Libraries: Oops, Pandas, NumPy, Scikit-learn, NLTK, TensorFlow
- Data Visualization Techniques: Matplotlib, Seaborn, EXCEL
- o Cloud: Azure Cloud
- Other known software: QGIS, Google earth engine, CAD

POSITIONS OF RESPONSIBILITY

Secretory Sports | MMM Hall Council, IIT Kharagpur

Sep'23 - Ongoing

- Pt. Madan Malaviya Hall of Residence is the Highest Boarders capacity hall with 2100 students of IIT Kharagpur Guiding the students to participate in Institute level and national level events while maintaining the documentation of council activities
- o Conducting and organizing sports events, where students showcase their talent

Volunteer | Department Placement office

Oct'23 - ongoing

Managing recruiting process

ACHIEVEMENTS

- o Captain of B zone University football team which stood up as Winners, Mar'2020
- \circ Selected for the National Merit Scholarship, NSP'2018
- Qualified GATE 2023