JIT MANDAL | 21ME30034

MECH.ENGG. Dual degree in any spl. (M.Tech Dual 5Y)
MICRO SPL. in ARTIFICIAL INTELLIGENCE AND APPLICATIONS

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	M.TECH Dual Degree 5Y	IIT Kharagpur	7.24 / 10
2020	WBCHSE	Hare School, Kolkata	85%
2018	WBBSE	Hare School, Kolkata	92.7%

INTERNSHIPS

WebD Intern trainee | Acmegrade |Moodindigo IIT Bombay [Jan'24-April'24]
- completed 3 month web development internship training program under the guidance of Acmegrade
- created projects using **HTML,CSS,JSS** and used libraries such as **BOOTSTRAP,JQUERY**
- Made a personal portfolio Website using HTML ,CSS ,Bootstrap

PROJECTS

Rubik's Cube Solver -Using Korf's IDA Algorithm | Self Project [Jan'23-Feb'23]
- Modeled a virtual **Rubik's Cube (3x3)** in 3 different models/classes using standard data-structures present in C++
- Achieved a solving time of under **3 seconds** for a Rubik's Cube **jumbled 8 times**, using BFS, DFS and IDDFS
- Implemented the **Korf's IDA* Algorithm**, achieving a solving time of **under 10 seconds** for a Rubik's Cube **jumbled 13 times**

Duplicate Question Pairs Checker | Self Project [Jan'24-Feb'24]
- Made a Duplicate Question Checker modelusing Bag of Words model and **TF-IDF vectorizer** on Quora dataset of **400K** question pairs to get maximum dataset and implemented the model
- Engineered **7** new basic features and expanded with more **15 advanced** features,and effectively utilised **Fuzzy** featuresfrom **Fuzzywuzzy** library ,executed data preprocessing anddimensionality reduction with **t-SNE**,to visualize the high dimensional data using Plotlyand Seaborn and Achieved a maximum accuracy score of **80.82%** after engineered the features using **Random Forest** Classifier and **XGBoost** Classifier

Kaggle Fake News Classifier Using LSTM [Sept'23-Dec'23]
- Developed a deep learning model using LSTM to classify news articles as fake or real. Implemented preprocessing techniques, trained LSTM model architecture, and evaluated performance metrics like accuracy, precision, and recall.
- Collaborated in a Kaggle competition setting,Used Python, TensorFlow, Keras, NLTK

DIY project | IIT Kharagpur [Jan'22-Feb'22]
- Implemented a water pump sms controller,alert and feedback system
- used **I2C LCD** library module, implemented and syncronized buzzer , LED using C++
- Boosted accuracy of via applying PCA on the training Data to achieve an accuracy of **91.57%** and F1-Score of **0.915**

SKILLS AND EXPERTISE

Programming Languages : C | C++ | SQL |Javascript | Python
Frameworks and Libraries : Reacts| NodeJs |PostgreSQL |MangoDB |JQuery |Bootstrap
Softwares and Tools : Excel |VS Code| Git | LaTex | AutoCAD | MATLAB | smart PLS

COURSEWORK INFORMATION

Mathematics and Computer Science: Linear Algebra and Complex Analysis, Programming and data structures, Transform Calculus, Advanced Calculus, Partial Differential Equations, DBMS
Operating Systems : Windows, MacOs, linux ,COA
Marketing and Economics: techprenual marketing , economic

EXTRA CURRICULAR ACTIVITIES

Cultural - Member of the Bronze-winning Illumination Design team Rajendra Prasad Hall of Residence [2022]
Sports - Won First place in the intra-hall kabaddi competition hosted by Rajendra Prasad Hall, surpassing 9 teams
NSO - played volleyball for 2years having NSO volleyball as EAA

COMPETITION/CONFERENCE

- **4 star** in codechef with a rating of **1862 (**Handle : **jman_cc)**
- **pupil** in codeforces with a rating of **1362 (**Handle : **jmandal254)**
- Ranked in the top 1% among 10 lakh students in Joint Entrance Examination Advanced 2021