ARITRA SAHA

Kolkata, West Bengal

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Education

Jadavpur University   June 2020 - June 2024
Bachelor of Technology in Electronics and Telecommunication (CGPA of 8.80)   *West Bengal, India*

Welland Gouldsmith School
ISC : 90.2% ICSE : 94.8%

Experience

Github Link

* Developed an **optimal Recommendation Model** aimed at advising the farmers on **optimal crop choices** based on specific soil profiles.
* Used **Supervised as well as Unsupervised** ML models to find out **F1 score, Confusion Matrix, Precison and Accuracy** of each of the **22 crop varieties** which were above **90%**.
* Produced **4-5 visualization aids** showcasing the performance of different **feature extraction models**,using libraries such as **PyTorch, Seaborn and Plotly**
* Using **Keras, Tensorflow** ,attained **95% accuracy rate** while recommending crops via **Deep Neural Network**.

Projects

FinView | *NodeJS, ReactJS, ReChartsAPI, MongoDB, Express*

Github Link

* A financial website utilizing **ReactRechartsAPI** that includes **10 graphs and charts** to compare the various parameters of the dataset's characteristics and track **financial health**.
* Used **Material UI primarily** for front-end components, **TypeScript** for programming, **Vite** for application structure, **Redux Toolkit** for state management.
* For backend, utilized **Node.js with Express.js, MongoDB** as database, and **regression-js for linear prediction** of the revenue for the next financial year.

Health Monitor

Github Link

· Designed a **predictive model** that would cater to patients of **varying age groups** taking into consideration health parameters like **heart rate, pulse, spo2, temperature, body gait**. Data collected via Raspberry Pi hardware platform will primarily be using **LoRA and 5G for data transmission in rural areas.**
· Implemented **4** supervised learning algorithms namely **KNN, DT, SVM, Gaussian NB**.
· Utilized **One Hot Encoding technique** as the dataset had strings/characters in it.
· Data visualisation using the **MatPlotlib and Plotly** libraries were used to compare each of the learning algorithms, with the top giving an accuracy of **98%**, and more than **6 accuracy metric parameters** were established.

Achievements and Certificates

· Secured a position **among the top 5 teams** in a Hackathon conducted by SEBI on the topic of **Finance**
· Python Certificate from Kaggle.   Certificate Link
· Certificate on **Artificial Intelligence and Machine Learning**   Certificate Link

Profile Links

· GitHub
· GFG Profile

Technical Skills

Languages: Java, SQL,, Python, HTML/CSS, Typescript
Technologies/Frameworks/Libraries:DBMS, OOPS, ReactJS, TailwindCSS , MongoDB, Node.JS