Abbinav Sankar Kailasam

Chennai, India | Email: abbinavsankar2003@ gmail.com | Mobile: +91 9361372623 | Age: 21

Education

Sai University, Chennai (9.0/10.0 CGPA)
Bachelor of Technology Computing and Data Science, (2021 - Present)

Chennai Public School, Chennai
CBSE, (2015 - 2021)

Coursework

Machine Learning (Scikit-learn), Deep Learning (Tensorflow, Keras Pytorch), Statistics for Data Science, Financial Modelling in Python, Time Series Analysis, Data Structures & Algorithms, Database Management Systems, Distributed Computing and Big Data, Quantum Computing, Compiler Design, Principles and Foundations of Economics, Fundamentals of Finance.

Experience

Titan Company Limited | *Data Analyst intern* (May 2023 - July 2023)

- Worked on a project to determine the potential of smartwatches in the retail channel.
- Developed a time series model that forecasts Titan and Fastrack smartwatch sales in the retail channel for the next 6 months.
- Implemented a variety of time series models to forecast sales - ARMA, ARIMA, ARIMAX, SARIMAX, LSTM.
- Achieved a mean absolute percentage error of 3% with the SARIMAX model.
- Tools: Excel, Amazon Redshift, Python - Scikit-learn, Starsmodel

Sai University | *Academic Representative of CDS* (Oct 2022 – Oct 2023)

- Got Elected as the Academic Representative of CDS dept. by the student body.
- Organized talent showcases and debate contests with the aim of promoting and fostering public speaking skills.
- Organized by weekly meetings with the dean to voice the general concerns of the student body.

Projects

Financial RAG Application | *GenAI Project* (May 2024 – Present)

- Create a GenAI RAG application to provide specific inferences from SEC 10K yearly reports of publicly listed companies in the US.
- Tools: Python - Llama Index, Ollama, Llama 2

Movie Review Sentiment Analysis | *NLP Project* (Dec 2023 – Jan 2024)

- Classification of IMDB movie reviews into “good” or “bad” reviews using a transformer model with 2 encoder blocks.
- Tools: Python - Tensorflow, Keras, KerasNLP

Ornamental Flower Classification | *CV Project* (Dec 2023 – Jan 2024)

- Classification of ornamental flower images into 5 types using Transfer learning and Fine-tuning of 3 popular CNNs - Inception ResNet V2, EfficientResNet V2 B0 and ConvNeXtTiny. Finally the best performing fine-tuned models of each are ensembled with majority-rule voting. [Link]
- Tools: Python - Tensorflow, Keras

Predictive Modeling | *Data Science Project* (Oct 2023 – Dec 2023)

- Using regression and classification modeling techniques to classify wine samples into different grades of quality (1-10). Maximizing inferences obtained from the dataset. [Link]
- Tools: R - Regression, LDA, Feature Selection , Feature Engineering

Classical Machine Learning | *ML Project* (Apr 2023 – June 2023)

- Regression: Predicting the Spatio-temporal water quality indicated by median pH value. Achieved a root mean squared error of 0.0293 using Multivariate linear regression. [Link]
- Classification: Predicted whether a Mushroom is edible or poisonous. Achieved an accuracy and F1 score of 1.0 using Gradient Boost classifier. [Link]

Relevant Certificates

Large Language Models - IIT Madras Workshop [Link]
GPT from Scratch - IIT Madras Workshop [Link]

Technical Skills

Languages: Python, R, Julia, C, SQL (RedShift)
Developer Tools: Git, Docker, VS Code
Libraries: Scikit-Learn, Tensorflow, Keras, KerasNLP, Pytorch, Statsmodels, Numpy, Pandas, Llama Index
Applications: Microsoft office, Google cloud services, Canva, Latex