Favas M

Tiger Analytics | Indian Institute of Technology Madras
+919092904409 • favasmfsm@gmail.com • favasmfsm • favasm

Summary

Data Scientist proficient in large language models (LLM), deep learning algorithms, and natural language processing. Demonstrated ability to deliver valuable insights through data analytics, with a solid qualitative background. Skilled in document AI, topic modeling, and text matching algorithms.
Expertise: LLM, Deep Learning, NLP

Professional Experience

Tiger Analytics **Chennai, India**
Senior Data Analyst *December 2021 – Present*

- **Advanced Analytics Research Team**
  - Developing a library to automate the generation of predefined code templates for diverse NLP/LLM applications
  - Developed a QnA system transforming documents into chatbots using Langchain and open-source LLM models.
  - Extracted underlying data from different kind of documents like handwritten texts, and invoices with an F1 of 0.78
  - Gained hands-on experience with libraries for document understanding(LayoutLM), QnA(Donut) and different embeddings like BERT, sentence-transformers
  - Created an embedding based deep learning model to map products with similar description that supports multiple embeddings like BERT, sentence-transformers with an F1 of 0.84.
  - Worked on a machine learning model for the analysis of the aspect based sentiment from product reviews
  - Implemented a transformer based algorithm for efficient topic clustering within documents and facilitated the visualization of these topics
- **Consumer Packaged Goods (CPG) Team**
  - Analyzed the level impact of different business decisions on the sales and customer acquisition for different time scales.
  - Build predictive models using various machine learning tools to forecast the sales and the requirements for different products.
  - Designed algorithm to track and detect customers prone to attrition based on the customer order patterns.
  - Conducted a market basket analysis to uncover the associations between different products. Developed an algorithm to create combinations of products to ease the shopping.

Micron Technologies Inc **Hyderabad, India**
Solutions Engineer *August 2020 – August 2021*

- Applied data analytic and optimizations techniques in manufacturing to improve yield and reliability.
- Developed and Deployed scalable code into production using CI/CD tools.
- Responsible for investigating the failures and yield losses by analyzing the data for failure patterns.

Mahindra and Mahindra Ltd **Chennai, India**
Graduate Technical Intern *May 2018 - June 2018*

- Worked on intelligent farm devices in the Department of Sustainability, Innovation and Technology.
- Developed an intelligent precision vineyard sprayer for automatic detection of pests and the accurate spraying of pesticides.

Education

Indian Institute of Technology Madras — **Chennai, India**
Master of Technology, GPA - 8.62/10 — *2018 - 2020*

Indian Institute of Technology Madras — **Chennai, India**
Bachelor of Technology, GPA - 8.10/10 — *2015 - 2020*

Kerala State Board — **Kerala, India**
Class 12th, GPA - 9.62/10 — *2012 - 2014*

Central Board of Secondary Education — **Kerala, India**
Class 10th, GPA - 10/10 — *2011 - 2012*

Scholastic Achievements

- Scored **99 percentile** in the CAT 2021 and secured admission to the top business schools in India. 2021
- Awarded with Charpak Scholarship for Exchange program in France 2018
- All India Rank - 1820 in JEE 2015, taken by 1.3 million students (99.86 percentile) 2015
- Selected for INSPIRE Fellowship(99 percentile) for the excellence in class XII 2014

Research Projects

M.Tech Project — **IIT Madras**
Guide: Prof. Ranjith Mohan — *July 2019 – June 2020*

- Developed an autonomous quad-copter capable of navigating in GPS-denied environments.
- Implemented SLAM based algorithm that analyse the image data from a stereo-vision based setup to build a 3D representation of the surroundings.

Fire Fighting Drone — **IIT Madras**
Guide: Prof. Ranjith Mohan — *April 2019 – June 2019*

- Worked on an Autonomous Unmanned Aerial Vehicle with an onboard Raspberry Pi and Pixhawk as a flight controller for outdoor firefighting missions.
- Developed a GPS-based navigation system that enables the Aerial Vehicle to find the path and navigate through the given waypoints to the fire spot.

Relevant Courses and Skills

- Courses
  - **o** Artificial Intelligence
  - **o** Deep Learning
  - **o** Natural Language Processing
  - **o** Machine Learning
  - **o** Prompt Engineering
  - **o** Generative AI with Large Language Models
- Skills
  - **o** LoRA,Langchain
  - **o** Git, Azure
  - **o** TensorFlow,PyTorch
  - **o** Spacy,LayoutLM
  - **o** BERT,Sentence transformers
  - **o** Matplotlib,Plotly