Favas M

Annolive AI | Indian Institute of Technology Madras
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Summary

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

Professional Experience

Annolive AI **Calicut, India**
Co-Founder, Head of AI *April 2024 – present*

- Designed, developed, and sold an AI-assisted data annotation solution that ensures privacy compliance while optimizing the labeling process for AI teams working with sensitive data.
- Developed and trained a multi-label classification model to categorize SEC notes into predefined categories, using a combination of transfer learning and enhanced architecture with an F1 score of 0.9
- Engineered a solution to automatically update an e-commerce website using web scraping, text matching, data transformation, and LLMs, saving the client over 2,500 hours of work.
- Built a RAG solution to automate the dataset generation for finetuning an LLM for the financial compliance documents

Tiger Analytics **Chennai, India**
Data Scientist *January 2024 – April 2024*

- **LLM/NLP Team**
  - Created a library to automate the generation of predefined code templates for diverse NLP/LLM applications
  - Developed a QnA system for in-house project documents into chatbots using Langchain with an accuracy of 0.8
  - Engineered a CoT chatbot for training and assisting in-shop sales executive by creating personalized recommendations for customers based on inventory
  - Built an AI enabled RAG chatbot to be used by the field service agent of an HVAC company while repairing machines

Senior Data Analyst *December 2021 –December 2023*

- **Advanced Analytics Research Team**
  - 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.

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

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 UAV with an onboard RPi 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 to the fire spot.

Relevant Courses and Skills

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