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CAREER OBJECTIVE

Data science graduate seeking an entry-level role in Data Science, AI, Generative AI and Software Development to apply analytical skills and deliver impactful solutions.

Internship Data Science Intern (risposta) Aug 2024-Nov-2024

- Supported the data science team in various tasks related to data preprocessing, analysis, and visualization over a 3-month internship.
- Actively contributed to ongoing projects by handling assigned responsibilities efficiently and offering support to teammates whenever needed.
- Collaborated with team members to assist in creating insightful reports and interactive dashboards using tools like **Excel, Python, and Power BI/Tableau**.
- Gained hands-on exposure to real-world data science workflows, teamwork, and reporting processes in a dynamic startup environment.

TECHNICAL SKILLS

Programming Languages : Python, HTML, and CSS.
AI/ML Models & Analytical skills : Supervised Algorithms, Unsupervised ,Algorithm, Reinforcement, Generatve AI, LLMs, Neural Networks, Model Evaluation and Hyper parameter Tuning, Statistics, EDA, ETL , Streamlit , Data Visualization
Deep Learning : NLP, Generative Models, Convolutional Neural Networks, Transformers, Recurrent Neural Networks, Sciket Learn, Tensor Flow, Keras, Pytorch
Data Base & Core Concepts: DSA basics, SQL ,OOPS , DBMS
Tools: VS Code, Colab, Jupyter NoteBook, Github , PowerBI , Excel,

SOFT SKILLS

Analytical Thinking , Problem Solving , Communication and Storytelling with Data, Team Collaboration

EDUCATION

BACHELOR OF TECHNOLOGY *SEP 2020 - MAY 2024*
Computer science and Engineering (CGPA: 8.04)
Kalasalingam Academy of Research and Education

PROJECTS

- **Market Research Use Case Generation Agent**

  - Multi-Agent architecture system that generates relevant **AI and Generative AI** use cases for a given Company or Industry.
  - Designed and implemented a Streamlit-based application to automate market research, leveraging **OpenAI, Kaggle API**, and Google Search for trend analysis, Generative AI use case creation, and dataset collection.
  - Generated comprehensive Excel reports integrating AI use cases, industry trends, and Kaggle datasets, enabling actionable insights for companies across multiple industries.
  - **Tools and Technologies**: Python, Streamlit, OpenAI API, Kaggle API, Google Search API, Pandas, XlsxWriter, HTML/CSS.

- **Demand Forecasting and Product Planning**

  - Utilized **ARIMA/SARIMA** models to analyze time series data, identifying seasonal trends and temporal patterns.
  - Designed and deployed a hybrid forecasting and recommendation system combining ARIMA, SARIMA techniques to optimize prediction accuracyImplements RFM segmentation to analyze customer recency, frequency, and monetary value.
  - **ARIMA Metrics : MAE: 4.64 | MSE: 29.04 ,SARIMA Metrics : MAE: 4.64 | MSE: 29.10**.
  - Designed Interactive web app for analyzing sales data and forecasting demand using Streamlit
  - **Tools and Technologies:** Python, SQ, VS Code, AI, ML, NLP,DL, Reactjs, HTML, CSS, Java script, Colab.

- **Content-recommendation-system**

  - Designed a personalized recommendation engine for Disney+ Hotstar using Python and machine learning, leveraging cosine similarity for item comparisons and feature extraction.
  - Applied content-based filtering to recommend similar items based on user preferences, **collaborative filtering** to analyze user behavior, and a **hybrid approach** for enhanced accuracy and relevance.
  - Computed the dot product and normalized it with vector magnitudes to measure item similarity, ensuring precise and personalized content suggestions with values between **-1 (dissimilar) and 1 (similar).**
  - **Tools and Technologies:** Power BI, Data Visualization, Trend Analysis, Filtering

- **Sentiment Analysis on Food Reviews (NLP)**

  - Pre-processed and tokenized text data, creating visualizations such as Word Clouds, Review Trends, and Sentiment Proportions using Python and libraries like **NLTK,** Pandas, Sklearn, and Seaborn to extract actionable insights.
  - Developed sentiment classification models using **TF-IDF, Logistic Regression, and Naive Bayes algorithms**, optimizing performance and achieving strong evaluation metrics.
  - **Tools and Technologies**: Python, NLTK, TensorFlow, Seaborn, Matplotlib, Colab, NLP,Pandas, Numpy, SKlearn ,Regular Expression

- **Text-to-Image Generation Using Stable Diffusion (GenAI)**
  - Designed a system to detect and leverage GPU resources for faster image generation, ensuring seamless processing and improved performance for large-scale data pipelines.
  - Integrated Hugging Face's diffusers library with pre-trained models (e.g., **runwayml/stable-diffusion-v1-5**) to convert natural language text prompts into high- quality, photorealistic images.
  - Enabled image display using **Matplotlib**, allowing users to visualize, save, and further manipulate generated images for creative or functional purposes.
  - **Tools and Technologies:** Stable Diffusion, Hugging Face diffusers, Python, Matplotlib, GPU, Pre-trained Models, ML libraries

CERTIFICATIONS

- **Crash Course on Python** – Google (Coursera)
- **Structured Query Language (SQL)** – University of Colorado Boulder (Coursera)
- **Microsoft Azure for Data Engineering** – Microsoft (Coursera)
- **Data Science Graduation Certificate by IBM**