Yashwanth Tadakamalla

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⊙ Yashwanth   ◉ Portfolio   ⚲ Eschborn, Hessen, Germany

Work Experience

Eurex Clearing AG   Mar 2024 – Present
Intern Analytics and Pricing   *Eschborn, Germany*

- Leading the implementation of a Client Performance Management tool, which incorporates Outlier Detection and Trend Analytics features, to provide deeper business insights and enhance client understanding.
- Created a comprehensive billing fee dashboard using Power BI, facilitating easier billing analysis by incorporating multiple KPIs and client-specific metrics.
- Implementing revenue prediction models and inter-month analysis tools to enhance the team's forecasting and analytical capabilities.
- Developed and managed high-stakes presentations for Business Review, Supervisory Board, and Executive Board meetings, collaborating with various departments for insights.
- Conducted counterparty and client-specific analyses, contributing to strategic decision-making.

Ernst & Young   Nov 2021 – July 2023
Technology Consultant Intern   *Düsseldorf, Germany*

- Conducted exploratory data analysis and contributed to the training and implementation of a BERT model for job requirements and resume matching.
- Conducted meticulous data labeling and cleaning, elevating data quality and significantly enhancing the accuracy of subsequent analyses and models.
- Designed and deployed a Chatbot using Power Virtual Agent.
- Demonstrated expertise in AI through various projects, including creating an automatic code-commenting system and an interview bot utilizing the OpenAI API.
- Ensured comprehensive project documentation, documenting all software development processes and results for future reference and knowledge sharing.

Projects

AskyourDocAI | *SQL, Python, RAG, Prompt Engineering, LangChain, OpenAI, VectorDB, LLM*   **March 2024**

- Enhanced document search capabilities using advanced Large Language Models (LLMs) including Mistral 7B, LLaMA 2 7B, and OpenAI models.
- Implemented RAG techniques to improve the accuracy and relevance of search results.
- Developed sophisticated prompt engineering methods to optimize the performance of LLMs in various search scenarios.
- Utilized modern databases such as Pinecone and ChromoDB for efficient storage and retrieval of document embeddings.

Master Thesis: Reconfigurable FPGA Layout Generation | *Python, Optimization algorithms*   **May 2023**

- Developed and implemented novel Simulated Annealing and Evolutionary Strategy algorithms to efficiently solve the layout generation problem based on micro-slots.
- Conducted an extensive comparative analysis of the performance and effectiveness of SA and ES algorithms in generating optimal layouts.
- Conducted comparative analysis of SA and ES algorithms against Heuristic and Optimal solutions.

Comment Your Code: | *Python, Prompt Engineering, API, Automation*   **June 2023**
- Utilized prompt engineering to prompt the GPT API to create explanatory comments above functions within the uploaded .py files. This automation significantly enhances code documentation and readability.
- The chatbot's automated comment generation contributes to code quality by ensuring clear and consistent documentation of function purpose and usage, fostering better code maintenance and team collaboration.

Interview Bot: AI-driven Interview Process | *Python, Prompt Engineering, Streamlit, API*   **June 2023**
- Applied advanced prompt engineering techniques to optimize Interview Bot for contextually relevant interview questions.
- Seamlessly integrated the GPT API as the project's natural language generation engine, enabling dynamic and personalized question generation based on job descriptions.
- Employed the GPT API to assess user responses against job descriptions, facilitating real-time feedback and suitability evaluations.

Interactive Sales Dashboard | *PowerBI, SAP Analytics Cloud*   **May 2023**
- Identified key performance indicators (KPIs) relevant to sales, such as revenue, sales growth, customer acquisition, and product performance.
- Designed an intuitive and visually appealing dashboard layout, ensuring easy navigation and data interpretation.
- Implemented interactive filters and slicers to allow users to customize the dashboard view based on specific criteria.

Semantic Matching with German BERT for CV AFO Matching | *Python, NLP, ETL, Pandas*   **June 2022**
- Developed CV matching application, utilizing semantic matching with a German BERT model for effective job requirement matching.
- Conducted exploratory data analysis and ensured precise data cleaning and model training.

CV- Named Entity Recognition (NER) | *Python, NLP, ETL, Data Labelling, Data Modelling*   **January 2022**
- Developed an advanced system using Spacy and NLTK for accurate Named Entity Recognition (NER) in resumes, facilitating efficient skills and role categorization.
- Led comprehensive data cleaning and precise text labeling, ensuring high-quality input for the system.

Education

Paderborn University   **2019 − 2023**
Informatic Master   *Paderborn,NRW,Germany*
- Interactive Data Visualization
- Model-Based Systems Engineering
- High-Performance Computing
- Machine Learning
- Software Quality Assurance
- Design and Code analysis
- Advanced Computer Architecture

Technical Skills

Programming Languages: Python, R, SQL, Scala
Tools: Power BI, Databricks, Tableau, BigQuery, DAX, SAP Analytics Cloud, CI/CD, DynamoDB, PowerApps, MS Office, MS Excel, Git, Apache Spark, Hadoop, Big Data tools, Microsoft Azure, Google Cloud, Docker, Agile Project Management, Jupyter Notebook
Data Analysis and Visualization: Data Mining, Data Modeling, Data Pre-processing, Data Structures and Algorithms, Image Classification, Exploratory Data Analysis (EDA), ETL, Dashboard Creation, Matplotlib, Seaborn
Web Development: HTML, CSS, Flask, Streamlit

Languages

- German – Intermediate
- English – Fluent