Mazi Prima Reza - Data Scientist

Mazi Prima Reza is a skilled Data Scientist with over three years of experience in the data field, currently working at Metrodata in Jakarta, Indonesia. His professional journey is marked by a strong background in handling diverse and end-to-end projects, ranging from data analysis to the implementation of advanced generative AI technologies. Mazi is dedicated to building innovative solutions that automate repetitive tasks and enhance user experiences through cutting-edge data analytics.

In his current role at Metrodata, Mazi has successfully implemented Generative AI Natural Language Processing using Microsoft Azure Open AI to develop a chatbot designed to assist the Human Resources Division and employees in comprehending company policies more effectively. Despite being a new hire with little knowledge about chatbots and NLP, Mazi took the initiative to learn outside working hours, enabling him to understand the project requirements thoroughly and contribute effectively from the start. Additionally, he has utilized Generative AI in the finance sector to summarize and analyze new and updated regulations, thereby aiding GRC analysts in streamlining their workflow and automating analysis to inform the team faster.

Notable Projects at Metrodata:

- **HR Chatbot Development**: Led the development of a chatbot using Microsoft Azure Open AI for the HR department. This project involved integrating NLP models to answer employee queries about company policies, resulting in a 30% reduction in HR response time.
- **Regulation Analysis Tool**: Developed a Generative AI tool for the finance industry to summarize and analyze new regulations, improving analysis speed by 40% and enhancing the efficiency of the GRC team.

Prior to his tenure at Metrodata, Mazi served as a Data Scientist at Vidio, a leading streaming service company in Indonesia. During his time at Vidio, he developed a recommendation model using collaborative filtering with cosine similarity, achieving a notable 0.2 Recall@20 and a 10%+ click-through rate, surpassing the performance of in-house recommendation systems. He also collaborated with the Marketing Team to predict persuadable non-subscribers, using TensorFlow Neural Networks to build a predictive model that achieved an 87% AUC score and resulted in a 20% conversion rate among targeted users. This collaboration improved customer targeting, allowing the marketing team to reach the right customers more effectively. Furthermore, Mazi significantly reduced the churn rate by implementing machine learning models with 90% accuracy. One unique challenge was the management's demand for early prediction capabilities, which the existing model couldn't provide. Mazi addressed this by creating a new model that could predict churn earlier by improving the dataset.

Notable Projects at Vidio:

• **Recommendation System**: Designed and implemented a collaborative filtering recommendation system using cosine similarity, which improved user engagement metrics significantly.

• **Churn Prediction**: Developed a machine learning model to predict user churn with 90% accuracy, enabling the marketing team to implement effective retention strategies.

Before transitioning to a data scientist role, Mazi worked as a Business Intelligence Analyst at Vidio, where he automated weekly subscription reports using Tableau, reducing report creation time by 50%. He conducted in-depth analyses of churned subscribers and user behavior, leading to a 10% reduction in the churn rate. His application of neural network time series analysis to predict monthly subscription trends played a crucial role in the company's strategic planning efforts.

Teaching and Mentoring:

In addition to his professional experience, Mazi has a strong passion for teaching and mentoring. He began his teaching journey as a volunteer Data Science Mentor with Generation Girls, where he inspired and guided young learners. Building on this experience, he collaborated with Generation Girls and the Ministry of Communication and Informatics (Kemneterian Komunikasi dan Informatika) to mentor elementary school students both offline and online in data science. Mazi's commitment to education continued with his role as an IoT and AI mentor for Samsung Innovation Campus under Skilvul, an education company. In this role, he mentored 24 students, helping them understand complex materials and providing intensive guidance to foster their innovative product development. His approach of giving simple examples, like explaining clustering through a McDonald's delivery system, proved effective in making complex topics accessible to young students. In smaller groups or one-on-one settings, students were more comfortable asking questions, significantly enhancing their learning experience.

Education:

Mazi holds a Bachelor of Science degree in Mathematics from Institut Teknologi Bandung, where he completed his undergraduate thesis on "ASABRI and JIWASRAYA Stock Portfolio Optimization using Adaptive Spiral Optimization Method," achieving a GPA of 3.16 out of 4.00.

Technical Skills:

His technical skills encompass a wide range of tools and technologies, including Python (with libraries such as Dash Plotly, Streamlit, Pandas, Sklearn, Keras, SHAP, Pytest, Flask, and more), PySpark, SQL, Open AI, GCP, Azure Machine Learning, Azure Open AI, Tableau, and Power BI. His expertise in data analysis includes statistical analytics, data preparation, data visualization, and dashboard building. In data modeling, Mazi excels in developing recommendation systems, supervised and unsupervised machine learning, user segmentation, prediction, NLP, time series analysis, Open AI, and explainable AI. For instance, he used Pandas for data analysis and processing, Azure for environment connectivity, Open AI for automating statements, Streamlit for creating front-end applications, and PySpark for processing large datasets.

Professional Development:

Mazi actively engages in continuous learning and professional development. He has attended key workshops and courses such as a Coursera course on Machine Learning, a Microsoft Azure Hackathon where he learned about Open AI, and the LangChain deep learning course from deeplearning.ai, which deepened his understanding of LangChain.

Personal Projects:

Mazi also works on personal data science and AI projects in his spare time, which can be viewed on his portfolio website.

Career Goals:

Mazi aims to become a T-shaped Data Scientist, with deep expertise in NLP, an area he is particularly passionate about and wishes to explore further.

Personal Interests:

Beyond his technical capabilities, Mazi is a proactive and innovative professional who consistently seeks to leverage data to drive business success and improve operational efficiencies. His interests include reading and hiking, which provide him with a well-rounded perspective and a balanced approach to both his professional and personal life.

For more information about Mazi Prima Reza, you can visit his LinkedIn or GitHub profiles.