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. Her 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.

Metrodata, Jakarta, Indonesia, Apr 2024 - Present

Metrodata is an information IT company in Indonesia. As a Data Scientist at a consultant company, Mazi has been working with several leading companies and industries in Indonesia to build automation products involving Machine Learning and Generative AI.

Notable Projects

1. HR Chatbot Development - Led the development of a internal company policies chatbot in an Indonesia leading food and beverage company using Microsoft Azure Open AI to automate HR daily tasks and improve employees awareness in company policies. This project involved integrating Gen AI models and RAG (Retrieval Augmented Generation) to answer employee queries about company policies, resulting in a 30% reduction in HR response time.
2. Regulation Analysis Tool - Developed a Generative AI tool for a finance industry company to summarize and analyse new regulations from OJK, Bank Indonesia, and Ministry of Finance. Improving analysis speed by 70% and enhancing the efficiency of the GRC team.

Tools
- **Azure AI Services**, including Azure Open AI, Azure ML, Azure AI Search, Azure Document Intelligence, and Azure Speech
- **Python for Data Analysis and Data Scientist**, e.g. pandas, sk-learn, and tensorflow.
- **Python libraries for deployment**, e.g. Flask, Streamlit.

Vidio, Nov 2020 – Apr 2024

Vidio is a leading streaming service company in Indonesia. I mainly focused on the recommendation system, though I also developed churn prediction, content performance prediction and keyword extraction using Generative AI.

Notable Projects
1. Implemented a recommendation model collaborative filtering using the cosine similarity algorithm. Achieved a remarkable 0.2 Recall@20 and 10%+ click-through rate (CTR), surpassing in-house model-based recommendation systems.
2. Collaborated with Marketing Team predicting persuadable non-subscribers to subscribe. Predictive modeling is built using Tensorflow Neural Networks and achieved an 87% AUC score, resulting in a 20% conversion rate among targeted users.

3. Worked closely with a consultant to build a heavy ranker model utilizing multi input neural networks, resulting in CTR increase in implemented sections.
4. Utilizing semi-supervised learning and GPT-4 model to extract micro genres from movies synopsis description for a better hybrid recommendation system. This method speeds the tagging process time by more than 80%.
5. Engineered ETL pipelines for cleaning unpublished films in existing tables, resulting in a 90% reduction in API errors. Improved data quality and streamlined processing workflows.
6. Transitioned from Scala Spark to PySpark for ETL pipelines, improving code accessibility. This shiftenhances collaboration with data analysts, fostering seamless code development and understanding.
7. Automated weekly subscription reports using Tableau, reducing report creation time by 50%.
8. Conducted in-depth analysis of churned subscribers and user behavior, reducing churn rate by 10%.
9. Applied neural network time series analysis to predict monthly subscription trends, facilitating effective planning for management and teams.

Tools

- Python for Data Analysis and Data Scientist, e.g. pandas, sk-learn, and tensorflow.
- Deployment Tools, Flask, Google Cloud Platform, Git, Jenkins
- Data Engineering Tools, PySpark, airflow
- Visualization Tools, Redash, Tableau, Metadata

Teaching and Mentoring

In addition to her professional experience, Mazi has a strong passion for teaching and mentoring.

AI and IoT Mentor

Skilvul for Samsung Innovation Campus Batch 5
Mar 2024 - Jul 2024
Samsung Innovation Campus is a bootcamp and competition by Samsung Indonesia for high school and university students to compete in AI and IoT projects that solve daily problems. Mazi's commitment to education continued with her role as an IoT and AI mentor for Samsung Innovation Campus under Skilvul, an education company. In this role, she mentored 24 students, helping them understand complex materials and providing intensive guidance to foster their innovative product development. Her approach in teaching is approaching students in smaller groups or one-on-one settings, students were more comfortable asking questions, significantly enhancing their learning experience.

There are two stages of bootcamp

- **The first stage** Mentoring 1000+ high school and university students online about fundamental of AI and IoT concepts.

- **The second stage** Intensively mentoring 6 groups consists of 4 university students the advanced concept of AI. Helping the groups to finish the final projects related to IoT and AI.

Data Science Mentor

Generation Girls
May 2022 - Mar 2023

She began her teaching journey as a volunteer Data Science Mentor with Generation Girls, where she inspired and guided young learners. Building on this experience, she collaborated with Generation Girls and the Ministry of Communication and Informatics (Kementerian Komunikasi dan Informatika) to mentor elementary school students both offline and online in data science. Her approach of giving simple examples, like explaining clustering through a McDonald's delivery system, proved effective in making complex topics accessible to young students.

She involved in several Generation Girls Program including:

- March 2023 - Computer Science 101 Mentor on Spring Club Explorer Program
- Dec 2022 -- Teaching Assistant on GenG's Hour of Code program Intermediate Class
- Sep - Nov 2022 -- Becoming a mentor and teaching assistant for several weeks in Data Science for Kids program in collaboration with YCAB (Yayasan Cinta Anak Bangsa) and Menkominfo (Ministry of Information and Communication Technology)
- May - Jun 2022 -- Collaborate with other mentors to construct a data science curriculum for high school and be a mentor for 25 high school students on their Summer Club 2022 program for five consecutive days.

Education

Mazi holds a Bachelor of Science degree in Mathematics from Institut Teknologi Bandung, where she completed her undergraduate thesis on "ASABRI and JIWASRAYA Stock Portfolio Optimization using Adaptive Spiral Optimization Method." In her academic experience, Mazi co-wrote a research paper titled, "Mathematical Modeling and Sensitivity Analysis of the Existence of Male Calico Cats Population Based on Cross Breeding of All Coat Colour Types." She also involved in many volunteers experience programs from Mathematic Students Association (HIMATIKA ITB) and Lampung Student Association (UBALA ITB), like Head of Media for Ubala ITB and Head of Creative for HIMATIKA ITB events.

Professional Development

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

Career Goals

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

Personal Interests

Beyond her technical capabilities, Mazi is a proactive and innovative professional who consistently seeks to leverage data to drive business success and improve operational efficiencies. Her interests include teaching, yoga, and designing, which provide her with a well-rounded perspective and a balanced approach to both her professional and personal life.

To contact and get more information about Mazi Prima Reza, you can visit her [LinkedIn](#) or [GitHub](#) profiles.