Project Title
Air Quality Prediction in Jakarta

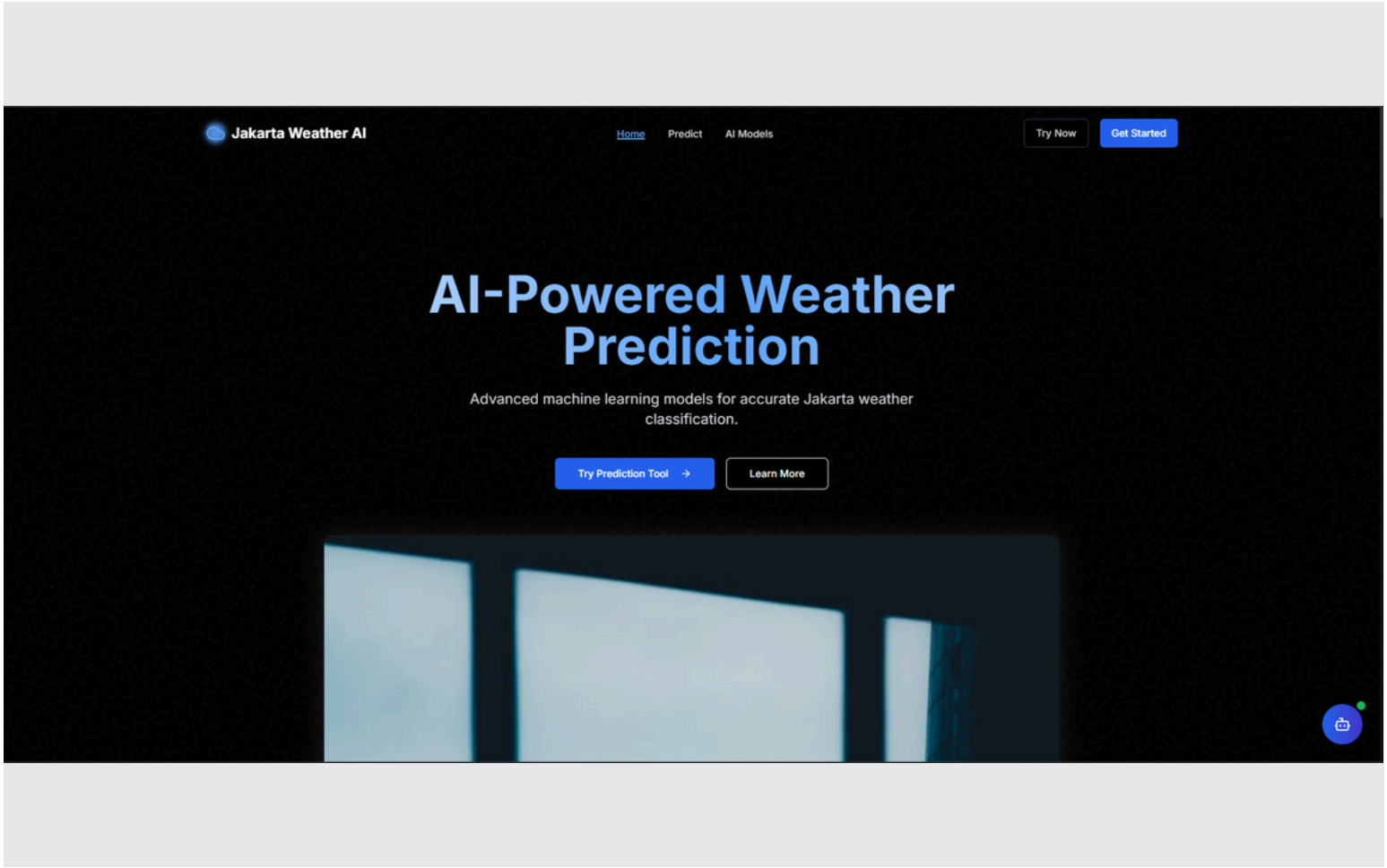
Year Accomplished
2025

Role/Position
AI Model Development
Frontend Engineer
Backend Engineer

Publication Link
https://front-end-index-air-quality-in-jakarta.vercel.app/

Project Summary
This project is a web-based platform that predicts air quality conditions in Jakarta, indicating whether the weather is good, poor, or unhealthy. The prediction model was built using machine learning techniques, while an integrated chatbot powered by the Gemini API allows users to ask questions and receive real-time responses. The website was developed as part of a learning project to combine AI and web development.

Project Reflection
Working on this project gave me the chance to explore how machine learning can be applied to real-world environmental data and presented in a most easy way. One of the most challenging but rewarding aspects was connecting the prediction model with the front-end and ensuring that the chatbot connect successfully. I also learned how important it is to balance technical implementation with usability, since people care not only about accurate predictions but also about how easily they can access and interact with the information. Through this process, I gained a deeper understanding of integrating AI models into web applications and I'm motivated to refine the project further with richer features and better performance.



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