Amalia Jamaludin

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Education

University of Michigan-Dearborn

B.S. Economics

B.A. Software Engineering

- GPA: 3.97/4.0, Dean's List & Honors Award
- Relevant Coursework: Operating Systems, Database Management Systems, Software Architecture & Design Patterns, Data Structure & Algorithm Analysis, Economics Statistics, Macroeconomic, Microeconomic

Leadership & Work Experience

University of Michigan-Dearborn

Research Assistant

Michigan, United States May 2024 - Present

Dearborn, Michigan

August 2021 - April 2025

- Developed and tested statistical models to analyze the impact of Retail Health Clinics on wait times using advanced data visualization tools and statistical software (Stata).
- Designed simulation models to test various health policy scenarios, improving the accuracy of health service wait-time analysis.
- Authored detailed reports on data analysis, identifying key trends, and collaborated with faculty members.

Petroliam Nasional Berhad(PETRONAS)

Data Analyst Intern

Kuala Lumpur, Malaysia May 2023 - August 2023

- Analyzed large datasets related to oil and gas production, providing insights that improved operational efficiency.
- Acted as a liaison between the data team and the operations department, ensuring seamless integration of data insights into daily operations.
- Worked closely with senior analysts and engineers to implement data-driven solutions, resulting in more accurate forecasting models.

Projects

Inflation and Nominal Interest Rate

Researcher

Economic Statistics Course August 2023 - December 2023

- Conducted a comprehensive analysis of the relationship between inflation rates and nominal interest rates, using time-series data.
- Built regression models in Microsoft Excel to explore the impact of monetary policy on inflation trends.
- Applied econometric techniques to evaluate historical data, providing insights for potential policy adjustments.

TravelShare Website

Full-Stack developer

Software Engineering 2 Course January 2024 - April 2024

- Designed and implemented the back-end system, managing user data and travel experiences in a NoSQL database.
- Collaborated with a team to ensure smooth front-end and back-end integration.
- Debugged and tested the website to ensure responsiveness and functionality across platforms.

CarShare Website

Software Architecture & Design Pattern Course January 2024 - April 2024

Full-Stack developer

- Designed and implemented the front-end using JavaScript, HTML, and CSS, and built the back-end with Node.js.
- Managed user data in a MongoDB.
- Implemented robust authentication and authorization features to protect user data and ensure secure access to the application.
- Conducted thorough testing and debugging, identifying and resolving issues to enhance application stability and performance. Utilized automated testing tools to ensure reliability.

Additional Info

- Languages: Python, C++, Java, Javascript, NoSQL, React Native, Node.js, PHP, HTML, CSS
- Tools: Visual Studio, VS Code, Enterprise Architect, GitHub, Postman, Docker, Eclipse, GitBash, Linux, Stata, MongoDB, Microsoft Offices
- Data Science skills: Statistical Analysis, Data Visualization, A/B Testing