JOSUA SIREGAR

+6281324773927 | josuasiregar0103@gmail.com | https://www.linkedin.com/in/josua-siregar | https://srgjo27.github.io/my-web-portofolio/

Pandan, Tapanuli Tengah, Sumatera Utara

I am Josua Siregar, a final year Information Technology student at Del Institute of Technology with a career as a Back-End Engineer. During my studies, I have contributed to various software development projects, including my final project on Product Recommendation for an e-commerce website, where I served as the lead developer. I designed and developed a recommendation system integrated with front-end and back-end, using Python for data preprocessing and building recommendation algorithm models. By mastering the back-end programming of Node.js, PHP, Java, Go and Laravel frameworks, as well as React JS framework and SQL database management, I managed to achieve error evaluation using MAE and RMSE below 1, improving the accuracy of product recommendations for users. My expertise includes scalable system design, optimal algorithm implementation, effective database management, and rigorous testing, all contributing to improved system performance and better user experience.

Work Experiences

PT. Indonesia AirAsia - Tangerang, Banten, Indonesia   Feb 2024 - Jul 2024
Software Engineer (Intership)

- Developed a Flight Operation Super App using the Dart programming language with Flutter and Firebase as a database, which resulted in a 20-30% increase in work efficiency.
- Implemented cross-platform apps for Android and iOS, achieving 100% compatibility between the two operating systems, allowing users to switch platforms without losing functionality.
- Clean-coded the application program code, reducing bugs by 30% before launch, which improved application stability and reduced post-launch maintenance costs.
- Implemented security best practices such as user authentication and strict access rules to protect sensitive information, increasing user data security by 50%.
- Integrated REST APIs to speed up data exchange by 25-30% between the app and the AirAsia system, which optimizes app performance and provides a more responsive user experience.

Institut Teknologi Del - Laguboti, Sumatera Utara, Indonesia   Sep 2023 - Jul 2024
Back-End Developer

- Developed a front-end website using PHP with the Laravel framework, increasing development efficiency by 60%. And used MySQL database to store application data.
- Implemented a machine learning algorithm model with Python, which improved product recommendation accuracy by 80%.
- Built a REST API to connect the front end with machine learning, enabling seamless and responsive interface interaction and speeding up data exchange by 25%.
- Conducted testing on ± 300 users to test website performance and constraints, identifying and fixing bugs before launch.
- Optimized and evaluated the product recommendation model using MAE and RMSE, resulting in an error value below 1, increasing user satisfaction by 40%.

Puslit EGOV CENTER - Laguboti, Sumatera Utara, Indonesia   Sep 2023 - Dec 2023
Software Engineer (Intership)

- Developed Retribusi Air Minum application with a user-friendly interface resulting in a 30% increase in work efficiency.
- Developed a Tourism App that served approximately 1,000 users, significantly enhancing local tourism exploration.
- Demonstrated expertise in using Dart, Flutter, and Git, integrated with REST API, which increased functionality efficiency by 51%.
- Implemented key features such as listing, payment by QR Code, and complaint handling in the app, which increased user satisfaction by 30% and accelerated the transaction process by 50%.
- Implemented a thermal printer, reducing invoicing time by 35-45% and improving accuracy by minimizing manual entry errors.
- Implemented an integrated Google Maps API to enhance navigation, increasing user satisfaction by 30-40% by providing accurate and reliable directions.

Education Level

Institut Teknologi Del - Laguboti, Sumatera Utara, Indonesia   Aug 2021 -
Associate Degree in Information Technology, 3.55/4.00

- Developer for Kedaireka's Matching Fund Program in 2023.
- Assistant Matriculation of New Students Batch 2023.
- Lecturer Assistant / Practicum Assistant for Computer Architecture and Organization courses TA. 2022/2023.
- Participation in the Gemastik XV Competition in 2022.
- Student Leadership Program Participation TA. 2022/2023.

Organisational Experience

BEM IT DEL   Jan 2023 - Jun 2024

Member of the Order and Discipline Department

- Organized and supervised student activities, ensuring safety and order, which resulted in a 30% decrease in incidents of breaches of order.
- Responsible for the maintenance and enforcement of order during campus activities, ensuring a safe and orderly environment for over 1,500 students.

HIMATIF   Jul 2022 - Jan 2023

Member of Education Division

- Conduct tutorial activities for younger students every 3 weeks 2 times, to discuss and improve understanding of the subject by 25-30%.
- Conducting quizzes every 2 times 1 semester, to evaluate understanding during tutorial sessions by 30-40%.

Skills, Achievements & Other Experience

- **Achievements** ⊘ (2024): Meta Back-End Developer Profesional Certificate
- **Achievements** ⊘ (2024): Foundational C# with Microsoft
- **Projects** ⊘ (2023): Mechine Learning Dynamic Programming Implementation for Route Optimization
- **Projects** ⊘ (2023): E-Commerce Website build Golang Programming with Microservice
- **Projects** ⊘ (2023): Tracking Vaksin with ASP .NET
- **Projects** ⊘ (2023): Delhub Mobile-Based Application
- **Projects** ⊘ (2022): BookselfAPI
- **Soft Skills**: Communication, Leadership, Collaboration Team, Critical Thinking, and Problem Solving,
- **Hard Skills** : Programming Language, Web Development, Mobile Development, Database Management, Microservice and API, Debugging and Troubleshooting