

AL BAHRUL KARIM

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Banjarnegara, Jawa Tengah

Experienced Frontend & Mobile Developer with 6+ months of proven track record delivering applications for government agencies and private enterprises. Specialized in Flutter cross-platform development and React ecosystem with expertise in AI integration, Web3 technologies, and complex system architectures. Successfully contributed to multiple production applications across government and commercial sectors with focus on user-centric solutions.

Work Experiences

PT Nordspec Mandala Persada - Sleman, DI Yogyakarta

Nov 2024 - Present

Frontend and Mobile developer

- Collaborated with backend teams using REST APIs and GO services that resulted in 35% improvement in data synchronization and application performance across government systems
- Developed responsive web and mobile interfaces using React.js, Next.js, and Flutter with real-time features including WebSocket integration for live transcription and document processing
- Optimized state management using Bloc Pattern and GetX for complex workflows, implementing comprehensive error handling with custom exception handling and retry mechanisms
- Built role-based authentication systems and AI-powered document management interfaces that reduced manual processing time by 50% for government operations
- Implemented Web3 blockchain integration with Solana wallet connectivity (Phantom, Solflare) and developed smart contract analysis interfaces for decentralized applications

Education Level

Universitas Teknologi Yogyakarta - Sleman, DI Yogyakarta

Dec 2020 - Aug 2024

Bachelor of Computer Science, 3.55/4.00

- Rice Classification Research - Frontend Lead: Led frontend development and monitoring interface design for award-winning rice classification system utilizing digital image processing, aroma sensors, and moisture detection technology, achieving TOP 1 victory at SCI-ence HACKFEST SUCOFINDO 2023. Tech Stack: Frontend Development, IoT Sensor Integration, Data Visualization.
- Criminal Activity Detection System - IoT Developer: Developed IoT-based security system integrating night vision cameras with machine learning algorithms for automated criminal activity detection, responsible for sensor technology integration and system architecture design. Tech Stack: IoT Sensors, Machine Learning Integration, Night Vision Technology.
- Research Data Management Specialist: Managed comprehensive research data across interdisciplinary projects, ensuring data completeness, accuracy, and documentation standards while coordinating between multiple research teams and maintaining project timeline adherence. Tech Stack: Data Management, Documentation Systems, Project Coordination.
- IoT & ML Integration Developer: Integrated Internet of Things sensor technology with Machine Learning algorithms for real-time detection systems, focusing on hardware-software integration and algorithm optimization for enhanced detection accuracy and system performance. Tech Stack: IoT Integration, ML Algorithms, Hardware-Software Integration.

SMKN 1 Bawang - Banjarnegara, Jawa Tengah

May 2017 - Oct 2020

Senior High School

- Actively engaged in sports and computer programming extracurriculars, honing teamwork and logical thinking skills.

Projects

- AI-Powered Meeting Transcription System - BAWASLU (Indonesian Election Supervisory Agency): Developed mobile frontend for AI-powered meeting transcription application utilizing OpenAI Whisper API for speech-to-text conversion. Built intuitive user interface for meeting management, conversation recording, and real-time transcription display with seamless integration to backend services for central office operations. Tech Stack: Flutter, OpenAI Whisper API, REST API, Audio Processing UI.
- Document Classification System - Central Java Regional Parliament (DPRD): Built responsive web interface for automated document classification system using AI and machine learning technologies. Developed comprehensive document upload, processing, and management interface with web scraping capabilities and AI-powered categorization features to streamline parliament's document workflow management. Tech Stack: React.js, LLM APIs, Web Scraping Interface, Document Processing.
- Project Management Application - East Kutai Regional Government: Developed comprehensive project management application for regional government operations with project tracking, resource allocation, and progress monitoring capabilities. Implemented role-based access control system for different government departments and created reporting dashboard for project oversight and administrative management. Tech Stack: Flutter, Government Integration APIs, Role-based Authentication.
- Smart Meter Reading System - PLN (State Electricity Company): Built mobile application frontend for automated electricity meter reading

system with infrared sensor integration through USB cable connection. Developed offline-first mobile architecture enabling field workers to operate in remote areas without internet connectivity, with data synchronization capabilities for meter reading data extraction. Tech Stack: Flutter, Infrared Sensor Integration, USB Connectivity, Offline Storage.

- Kick Avenue Sneaker Marketplace Enhancement: Contributed to frontend development and feature enhancement of existing sneaker marketplace platform with modern e-commerce functionalities. Implemented responsive design improvements, performance optimizations, and SEO enhancements while integrating new payment gateway features and inventory management interface for enhanced user experience. Tech Stack: Next.js, React.js, Tailwind CSS, E-commerce APIs, Payment Integration.
- CogniHash Web3 AI Platform - Solana Blockchain: Developed frontend interface for Web3 AI agent platform with Solana blockchain integration including wallet connectivity (Phantom, Solflare) for user authentication. Built AI-powered smart contract analysis interface for risk assessment and insights, along with token swap functionality specifically designed for Solana network token interactions. Tech Stack: React.js, Solana Web3.js, Wallet Adapters, AI APIs Interface.

Skills, Achievements & Other Experience

- **Hard Skills:** Flutter (Bloc, Clean Architecture, GetX), React (Redux, Zustand), REST API, Mysql, Firebase, PostgreSQL, Express Js, Web3
- **Soft Skills:** Problem solving, Collaboration, Teamwork
- **Awards/Activities** (2023): TOP 1 SCI-ence HACKFEST SUKOFINDO, Copyright Registration Certificate for the academic work 'Design of an AI Model for Detecting Street Crime.'
- **Language:** Indonesia, English
- **Tools:** Git, Postman, Docker, VScode, Cursor