Muhammad Ghufran

📞 +62-813-5031-6598

✉ Ghufranbakrie@gmail.com　　in linkedin.com/in/ghufranbakrie　　⌗ github.com/GhufranBkri

🌐 gufriends.me

SUMMARY

As a student of Informatics from Syiah Kuala University, I, Muhammad Ghufran, have developed a strong foundation in software development. Having completed my coursework and awaiting graduation, I now work as a Software Engineer, applying my knowledge and skills in real-world technology solutions. Throughout my academic journey and professional experience, I have continuously deepened my understanding of software engineering principles and practices. I am confident that my educational background and hands-on experience make me a valuable contributor in the technology industry.

EDUCATION

Syiah Kuala University   Expected Agustus 2025
Bachelor of Science in Computer Science (GPA: 3.56 / 4.00)   *Banda Aceh, Aceh*
- **Relevant Coursework:** Web Development, Frontend Development, Backend Development, DevOps, Mobile App Development

EXPERIENCE

Teaching Assistant   Aug 2024 – Dec 2024
Software Development and Operations (Pengembangan dan Operasional Perangkat Lunak)   *Syiah Kuala University*
- Assisted in teaching software development principles and practices, focusing on mobile application development using Kotlin.
- Supported students in hands-on projects, providing guidance on best practices for Android app development and user interface design.
- Contributed to the development of course materials and resources to enhance the learning experience for students.

Backend Development Intern   Jul 2024 – Aug 2024
Aceh Social Service Department (Dinas Sosial Provinsi Aceh)   *Banda Aceh, Aceh*
- Developed a comprehensive employee information system backend for Aceh Social Service Department using Express.js and MongoDB for efficient data management and API functionality.
- Designed and implemented RESTful APIs for employee data management, including CRUD operations, authentication, and role-based access control.
- Optimized database schema design and queries in MongoDB to ensure scalable and efficient data retrieval for the employee information system.

Bangkit Academy   Feb 2024 – Jun 2024
Mobile Development   *Online*
- Developed expertise in mobile development using Kotlin, including hands-on projects creating dynamic and responsive Android applications.
- Worked collaboratively on a capstone project, Fintrack, creating a financial app for SMEs and integrating machine learning models for expense categorization and financial analysis, including forecasting.
- Enhanced problem-solving skills by tackling real-world mobile development challenges, optimizing app performance, and ensuring user-friendly interfaces.

Software Developer   Feb 2023 – Present
Freelance
- Developed expertise in mobile development using Kotlin, including hands-on projects creating dynamic and responsive Android applications.
- Worked collaboratively on a capstone project, Fintrack, creating a financial app for SMEs and integrating machine learning models for expense categorization and financial analysis, including forecasting.
- Enhanced problem-solving skills by tackling real-world mobile development challenges, optimizing app performance, and ensuring user-friendly interfaces.

Projects

SIPEMA | *Public Complaint System for USK*
- **Technologies used:** Hono, TypeScript, PostgreSQL, Prisma ORM.
- Engineered the backend for a public complaint management system using the Hono framework and TypeScript.
- Designed and implemented RESTful APIs for seamless complaint submission, tracking, and management.
- Architected a robust database using PostgreSQL and Prisma ORM for efficient data handling and query optimization.
- Implemented secure user authentication and a notification system for real-time status updates.

SIPEDAS | *Employee Information System for Aceh Social Service Department*
- **Technologies used:** Express.js, Node.js, MongoDB.
- Developed a web-based employee information system to streamline data management for the Aceh Social Service Department.
- Built a scalable backend using Express.js and Node.js with a high-performance MongoDB database.
- Implemented a secure, role-based authentication system and an approval workflow for data integrity.

Fintrack | *Financial App for SMEs*
- **Technologies used:** Machine Learning, Android.
- Developed a financial management application for Small and Medium-sized Enterprises (SMEs).
- Integrated machine learning models for expense categorization and financial forecasting.
- Implemented data visualization features to provide insights into financial trends and spending patterns.

Euran Waste Management System | *Integrated Waste Payment Project*
- **Technologies used:** Laravel, Geolocation Services.
- Developed an integrated waste management system to handle fee collection and scheduling.
- Implemented features for payment management, user notifications, and history tracking.
- Utilized geolocation services to optimize waste collection routes for operational efficiency.
- Built an admin dashboard for collectors to manage schedules, update status, and generate reports.

Technical Skills

Languages:Python, Kotlin, JavaScript, Python, PHP, HTML, CSS
Technologies: GIT, TypeScript, PHP, Kotlin, React.js, Node.js, Express.js, Hono.js, Next.js, Laravel, Tailwind, MySQL, PostgreSQL, MongoDB, ChatGPT
Concepts: Object-Oriented Programming (OOP), RESTful API design, Test-driven development (TDD), Agile methodologies, Microservices architecture, Continuous integration/continuous deployment (CI/CD), Software Development

Organizational Involvement

Vice Chair of Communication & Information, Informatics Student Association — 2023
Syiah Kuala University — *Banda Aceh, Aceh*
- Led communication and information efforts to strengthen organization engagement and visibility.
- Planned and implemented creative strategies to enhance organization activities and events.
- Created and managed the Instagram presence for Informatics (@hmif.fmipausk), ensuring compelling and relevant content to increase interaction with members and wider audience.
- Collaborated with other departments to ensure smooth coordination and achievement of organizational goals.

Member of Research and Development Informatics Student Association — 2024
Syiah Kuala University — *Banda Aceh, Aceh*
- Engaged in research and development activities, contributing to the advancement of student-led projects.
- Collaborated with fellow members to explore new ideas and technologies for innovative projects.

Member of Student Representative Council (DPM) — 2024
Syiah Kuala University — *Banda Aceh, Aceh*
- Participated in student governance and representation activities within the university.
- Contributed to policy discussions and decision-making processes affecting student welfare.
- Served as a liaison between students and university administration to address student concerns.