



MUHAMMAD FERDIANSYAH

Founder - ROBOCOMP.EXE | Software Engineer Programming Specialist
Digital Marketing Specialist

Islamic High School Country 1 Bengkulu City

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SUMMARY

I started careers as programming at 2015. Then my interest Engineer Software and grew further the following year and succeeded in creating a website display with HTML & CSS. In 2017 I opened a service for several people who wanted to create a personal website to make it look more professional. So that every year I always succeed in creating a project in the field of IT Programming, especially Web-Developer. Developing my potential by creating robotic projects and applications on a national scale as well as trying out the world of programming professionally at national to ASEAN levels.

WORK EXPERIENCE

PT. IMPIAN BENGKULU INDAH | SOFTWARE ENGINEER & WEBSITE DEVELOPER

- Build website structure and functionality from scratch using programming languages (such as HTML, CSS, JavaScript, PHP, or Python), both for front-end and back-end.
- Connecting the website with databases, APIs, and external services such as payment gateways or user authentication, and ensuring all systems run smoothly and securely.
- Maintain security, fix bugs, improve access speed, and ensure the website is always responsive on various devices and stays up-to-date technologically.
- Developed and maintained web-based applications using .NET Core / ASP.NET for scalable and secure backend services
- Designed and implemented RESTful APIs integrated with frontend applications (React.js / Angular)
- Built microservices-based architecture to support modular and high-performance systems
- Implemented CI/CD pipelines using GitHub Actions / GitLab CI to automate build, testing, and deployment processes
- Managed relational and non-relational databases including SQL Server, PostgreSQL, and MongoDB
- Developed and optimized high-volume data processing systems with efficient query handling and caching (Redis)
- Integrated third-party services and APIs including authentication systems (JWT/OAuth) and payment gateways
- Conducted unit testing and integration testing using tools like Jest and manual API testing via Postman
- Collaborated within Agile/Scrum environment, participating in sprint planning, daily standups, and code reviews
- Applied secure coding practices and basic understanding of information security standards in system development
- Deployed and monitored applications on cloud platforms such as AWS and Google Cloud Platform

Periode

2025 Feb - 2025 Dec

PT. IMPIAN BENGKULU INDAH | DIGITAL MARKETING SPECIALIST

- Manage social media such as Instagram, TikTok, and Facebook to make video content, product photos, promotions and greeting.
- Optimize SEO to fill content with Wordpress that contains Articles, Directory store, E-Newsletter, Events, News & Promotion.
- Designed and executed on-page and off-page SEO strategies to improve website rankings on search engines.
- Convincing that the green SEO score value is all good.

2025 Jan - 2025 Dec

PT. IMPIAN BENGKULU INDAH | DIGITAL MARKETING SPECIALIST

- Write and edit copy for digital advertising, social media, email marketing, websites, and printed promotional materials.
- Develop creative ideas and campaign concepts that support the brand's marketing strategy.
- Create strong headlines, slogans, and calls-to-action to increase engagement.
- Conduct audience and competitor research to produce relevant and targeted copy.
- Collaborate closely with graphic designers, photographers, and the digital marketing team to ensure visual and messaging alignment.
- Optimize text for SEO to increase search engine visibility.

2025 Jan - 2025 Dec

- Maintain brand voice consistency and ensure all materials are free from grammatical and spelling errors.
- Work within tight timelines and ensure all communication materials are released on time.

ROBOCOMP.EXE | SOFTWARE ENGINEER PROGRAMMER & ENGINEER ROBOTICS

2024 Aug – 2024 Nov

- Robotics and server engineer for database that robot integrated with Artificial Intelligence ChatGPT.
- I build and create humanoid robots based on Artificial Intelligence.
- Fixed and update website for personal and store.

ROBOCOMP.EXE | DRONE PILOT CONTRACT KALIMANTAN TIMUR FOR IKN

2024 Jan – 2024 Jul

- I received a contract project from a third party or outsourced company to operate a drone to map the required area and land size.
- I then received a six-month contract for the project.
- During the contract period, I successfully mapped the area of over 80 hectares entrusted to me.
- I operated a DJI Matrice 300 drone to accurately measure the area, which was output as a 3D file using ArcGIS, then printed on paper and presented using Microsoft PowerPoint.

KEMENTERIAN PUPR BENGKULU BWS SUMATERA VII | AEROGRAPHER & MEDIA GRAPHER

2023 Feb – 2023 Dec

- Operating drones and cameras to create photo-video documentation at the Ministry of PUPR.
- Responsible for taking photos and videos to upload to social media.

ROBOCOMP.EXE | SOFTWARE ENGINEER FULLSTACK WEB-DEVELOPER

2022 Jul – 2022 Des

- Served somebody and corporation in Bengkulu city to make their profile in website.
- Making application and maintenance data.

ROBOCOMP.EXE | PILOT DRONE

2022 Jul – 2022 Des

- Receive documentation services using drones.
- Mapping of areas with hectares.

TOKOPEDIA | ONLINE SECURITY SOFTWARE ENGINEER DATABASE

2022 Jan – 2022 Nov

- Database engineer for makesure the saving of server from attacks internal and external.
- Responsible for securing data and updating security regularly.
- Identify weaknesses and shortcomings in data security based on cyberattacks.

TOKO EMAS CENTRAL BENGKULU | DIGITAL MARKETING SPECIALIST

2021 Oct – 2022 Jun

- Responsible for serving customers online and in person.
- Manage social media to focus on digital marketing.
- Responsible for detailed financial records, incoming and outgoing goods.

UBER | ONLINE SECURITY SOFTWARE ENGINEER DATABASE

2021 Jan – 2021 Nov

- Database engineer for makesure the saving of server from attacks internal and external.
- Responsible for securing data and updating security regularly.
- Identify weaknesses and shortcomings in data security based on cyberattacks.

PROJECT BY SKILL PROGRAMMING

FRONT-END

Website, front page for login / register, interactive buttons, animation effects, navigation between pages, forms using HTML, CSS, JavaScript Framework: React. Vue, Angular, Bootstrap

BACK-END

Form validation (ensuring correct login and password), automatic system submission, API for website / mobile applications, payment process (balance check or transaction process), login and authentication system, user management (create, edit, delete accounts), unit stock management using Node.JS, Python (Django / Flask), PHP (Laravel), Java (Spring), Ruby, REST API / GraphQL.

DATABASE

Stores and organizes data so that it can be used by the back-end and displayed on the front-end. Stores user data, products, transactions, messages, etc. Store login history or user activity, manage relationships between data (e.g. user & order), search data (e.g. search products by keywords) using MySQL, PostgreSQL, MongoDB, and SQLite. Language: SQL (for database queries).

NEW PROJECTS BY CLIENT & OUTSOURCING

Financial Service (Banking & Insurance) / 2025 Mar - Mar 2026

- Developed and maintained scalable backend systems for banking and insurance platforms using Golang
- Designed and optimized relational database schemas (PostgreSQL) for high-volume financial transactions
- Built RESTful APIs for core features including account management, policy management, and claim processing
- Implemented secure authentication and authorization using JWT and role-based access control (RBAC)
- Developed transaction processing systems ensuring data consistency using database transactions and ACID principles
- Designed and implemented claim workflow system (submission, validation, approval, payout)
- Integrated payment gateway APIs and handled webhook-based transaction updates
- Optimized system performance using Redis caching and query optimization

- Implemented audit logging system for compliance and transaction traceability
- Collaborated with frontend and QA teams to deliver high-quality financial systems

Digital Banking Platform / 2024 Feb - Jan 2025

- Developed backend services for digital banking features such as user accounts, balance tracking, and transaction history
- Designed normalized database schema to handle financial data with high integrity
- Implemented secure transaction handling with rollback and error recovery mechanisms
- Built APIs for fund transfer, payment processing, and account validation
- Optimized SQL queries to improve response time and reduce database load
- Implemented data validation and fraud prevention logic for suspicious transactions
- Managed database migration and versioning using migration tools
- Ensured system security and data protection following best practices

Insurance Contract Project Core / 2023 Jun - 2024 Jul

1. Insurance Backend System

Role: Backend Developer

Tech: Golang, PostgreSQL, Redis, Docker

- Developed scalable RESTful APIs for insurance policy and claims management
- Designed relational database schema for policies, claims, payments, and users
- Implemented claim workflow (Submitted → Reviewed → Approved → Paid)
- Integrated JWT authentication and role-based access control
- Optimized performance using Redis caching
- Built API documentation using Swagger/Postman

Building a backend system for insurance policy and claims management with end-to-end workflow. Focus on scalability, clean architecture, and security.

2. Underwriting & Risk Scoring Engine

Role: Backend Developer

Tech: Golang, PostgreSQL

- Designed and developed risk scoring engine for insurance underwriting
- Implemented rule-based decision system to evaluate customer risk profiles
- Calculated premium dynamically based on risk level
- Built modular rule engine for easy business rule updates

Developing an underwriting system to determine customer risk levels and premiums using a flexible and scalable rule-based engine.

3. Payment & Notification Service

Role: Backend Developer

Tech: Golang, Redis, Docker

- Built an asynchronous notification system using a message queue
- Implemented payment webhook handling and transaction tracking
- Developed an automated premium billing and reminder system
- Improved system reliability using event-driven architecture

Built an event-driven payment and notification system to handle premium billing and automatic reminders to users.

Insurance Backend System (Policy & Claim Management API) / 2022 Mar - 2023 Mar

Build a backend system for insurance policy and claims management using a scalable and secure RESTful API architecture. This system supports policy creation, claims submission, premium payments, and status-based approval workflows.

Backend Developer (Project Based)

- Designed and developed a RESTful API for the insurance system (policy & claims)
- Created a database schema using PostgreSQL with complex relationships
- Implemented authentication & authorization using JWT
- Developed a claims workflow (Submitted → Reviewed → Approved → Paid)
- Integrated a payment system using webhook simulation
- Optimized performance using Redis caching
- Developed API documentation (Postman / Swagger)
- Used a Clean Architecture for maintainability and scalability

Project Overview: Developing a backend system for the insurance industry that includes Policy Management, Claim Processing, and Payment Integration modules. The system is designed to handle large data transactions, ensure data consistency, and support integration with external services.

Key Features:

- Policy Management (Create, Update, Cancel Policy)
- Claim Submission & Approval Workflow
- Payment & Billing System
- Document Upload (Claims & Policies)
- Authentication & Role-Based Access Control
- Notification System

SOFT & HARD SKILLS

- Microsoft Office (Word, Excel, Power Point): I am used to creating documents for writing and typing according to the needs I work on, working on data and analyzing compiling to presenting work processes and providing clear explanations.
- Photographer: Experienced in operating mirrorless and DSLR cameras for the needs of interesting photos and professional documentation.
- Videographer: Have experience to make videos for social media and digital marketing needs.
- Aerographer: Accustomed to flying drones for photo, video and mapping needs.
- Adobe Product Editing: Have the ability to edit photos or videos using Adobe software such as Photoshop, Illustrator and Premiere.
- Programming: Create projects such as websites, cyber data security maintenance, android applications and error repair.
- Robotics: Successfully build robotics using the latest analog, digital and Ai for household or personal needs.
- Negotiation: I have the ability to bargain for a product or service.
- Time Management: Accustomed to doing things on time and organizing things to always be under control with the best way of adaptation.
- Teamwork: Experienced to give each other tasks and be responsible for the trust that is done.
- Public Speaking: Good at providing material in front of many people in general and convincing the audience to be able to listen well.
- Problem Solving: Always have solutions to unexpected things and work around for other plans if they are not as expected.
- Customer Oriented: Experienced in meeting strangers and good at communicating to keep people comfortable and good at adjusting the discussion.
- Argic Mapping: Can make accurate measurements of the area by providing soft-files and paper printouts or 3d printers.

LANGUAGE

- Indonesia (Native) : I am a native and have the ability to compose good and correct words according to the applicable guidelines.
- English (Professional) : For daily life, I often speak English with people around me and communicate both in hearing, writing and speaking with an American or British accent and become a teacher.
- Arabic (Professional) : Often meet some people who are good at Arabic and become a teacher.
- Japanese (Beginner) : I am still a beginner who has completed Hiragana and Katakana massively.

CODING

Front-End : HTML , CSS, JavaScript

Back-End : JavaScript, Python, PHP, Java, Ruby, C#, Go, Rust

Database : SQLite, MongoDB, FireBase Realtime DB, Firestore, Redis

FRAMEWORK / LIBRARY

Front-End : React.JS, Vue.JS, Angular, Svelte, Bootstrap, Tailwind, CSS,

Back-End : Express.JS, Node.JS, Nest.JS, FastAPI, Flask, Django, Laravel, CodeIgniter, Spring Boot, Ruby on Rails, ASP.NET Core, Gin, SQL, MySQL, Oracle

Echo, Rocket, Actix

Database : phpMyAdmin, MongoDB, Compass, PgAdmin, Sequelize, Prisma,TypeORM

API / INTEGRATION

Postman (testing API), Docker (Containerization), Nginx (Apache - server web), JWT (OAuth - authentication), Redis (Cache data), CI/CD Tools (GitHub Actions, Jenkins, GitLab CI).

CERTIFICATION

Periode

iTronix Solution Python Programming

2025 May

Robotic Kreativisia 1st Place Provincial Level

2024 Aug

Robotic Best Technology 2nd Place National Level

2018 Nov

MUHAMMAD FERDIANSYAH _ Resume as Engineer Programmer & Software Front - End Specialist

PROFILE

Since 2014 I was inspired by Facebook which can present someone's profile to be viewed. But I thought about how to create a personal page that contains about myself. I tried to create my first website in 2015 as a form of my seriousness in the field of programming. Then I developed my talent in that field which then led me to the professional and specialist path.

EMPLOYMENT HISTORY

PT. IMPIAN BENGKULU INDAH | SOFTWARE ENGINEER FRONT-END DEVELOPER

I am a professional responsible for the development, maintenance, and improvement of websites. My duties include both technical and functional aspects of the website.

ROBOCOMP.EXE | SOFTWARE ENGINEER FULLSTACK DEVELOPER

I serve the creation of a website for car rentals in the city of Bengkulu

ROBOCOMP.EXE | SOFTWARE ENGINEER ROBOTIC DEVELOPER

I created a design using CSS and C++ to depict the projection of the robot that I am competing for at the national level.

ROBOCOMP.EXE | SOFTWARE ENGINEER WEBSITE DEVELOPER

I created a project in the form of a page display for the front UI & UX for the robotics development experience that I worked on for the purposes of a national level competition in South Kalimantan.

ROBOCOMP.EXE | SOFTWARE ENGINEER FRONT-END DEVELOPER

I provide website creation services for several people, including official profiles, individuals and several government agencies for information improvements and updates.

ROBOCOMP.EXE | SOFTWARE ENGINEER FULLSTACK DEVELOPER

I provide page creation services for several schools in the city of Bengkulu and update the display page to the system for the school.

ROBOCOMP.EXE | SOFTWARE ENGINEER WEBSITE DEVELOPER

I serve more animated display updates and overhaul the page layout for user experience.

PROJECT HISTORY

BUILDING A WEBSITE FOR CAR RENTAL AND RENTAL SERVICE

I managed to create a service website in the form of car rental and rental services for personal purposes, official trips and tourism in Bengkulu City

RESTAURANT ORDER AUTOMATION

I work on automated orders where customers open the website and then choose a food menu that is automated to the cashier and chef with a real and attractive display.

API SYSTEM INTEGRITY

I build API systems to integrate various services such as payments, shipping and authentication as well as data synchronization to connect internal applications with external platforms.

MAKE A WEBSITE FOR CAFÉ IN BENGKULU

I was asked to create an attractive website with functions to make it easy for consumers to see the cafe profile and order the menu directly which is connected to the cashier.

CHAT INTERFACE

I have experience in fixing errors and bugs on government and private websites and then updating the technology using React.js or Vue.js, Tailwind CSS.

DASHBOARD OR ADMIN PANEL

I have experience in creating admin system dashboards to visualize data and manage website-based applications using React.js, Chart.js/D3.js for graphs, and Tailwind CSS for styling.

PORTPPHOLIO PROJECTS

I was trusted to build a portfolio website for several officials in Bengkulu Province to display their profiles, works, work results and experiences using HTML, CSS, JavaScript technology, frameworks such as React or Vue.JS.

BUILDING A WEBSITE FOR STORE GOLD IN BENGKULU

Asked to build a personal website for a gold shop in Bengkulu to make it look more professional.

Periode

2024 Jan - 2025 May

2025 Jan

2024 Aug - 2024 Nov

2024 Apr - 2024 May

2024 Feb - 2024 Oct

2023 Apr - 2023 July

2023 Apr - 2023 July

Periode

2025 Jan

2024 Oct

2024 Apr

2024 Feb

2023 Jul - 2023 Dec

2023 Jun

2023 Feb

2020 Jan

MUHAMMAD FERDIANSYAH _ Resume as Engineer Programmer & Software Back - End & Database Specialist

PROFILE

I develop my skills in the Back-End & Database field as a form of my seriousness towards security in my country in Indonesia. I am quite concerned because the system that is built is still quite vulnerable to being penetrated by professional hackers. I want to build a good and almost impenetrable data defense system. For that, I always try my best to be a professional and specialist in this field.

EMPLOYMENT HISTORY

PT. IMPIAN BENGKULU INDAH | SOFTWARE ENGINEER BACK-END DEVELOPER

I am also responsible for focusing on building and managing the systems behind the scenes of the website. I develop servers, databases, and APIs so that data can be processed securely, quickly, and efficiently. With expertise in various programming languages such as Node.js, PHP, or Python, I ensure the system is stable, secure, and ready to handle user needs.

ROBOCOMP.EXE | SOFTWARE ENGINEER BACKEND & DATABASE DEVELOPER

For sometime I worked as a freelancer getting projects to build and update government or private systems that required my services as a professional programmer.

KEMENTERIAN PUPR BWS SUMATERA VII | KONSULTAN INDIVIDU - BENGKULU, INDONESIA

I was asked to help build the front page and improve several systems on the website to maintain important information and data related to the office.

TOKOPEDIA | SOFTWARE ENGINEER DATA SERVICE CYBER SECURITY - JAKARTA SELATAN, INDONESIA

I was responsible for updating database security because earlier that year there were frequent cases of hacking by foreign and local hackers.

UBER SINGAPORE | SOFTWARE ENGINEER DATA SERVICE CYBER SECURITY - CLIFFORD CENTER, SINGAPORE

I am responsible for securing the database and keeping the contract company's security patches up to date for 3 months.

MAN 1 BENGKULU | TRAINER ROBOTICS

I was asked to become a trainer at my school because I had previously been a national champion based on the C++ language for Arduino software.

PROJECT HISTORY

ARTIFICIAL INTELLIGENCE - BASED ROBOTICS

I had the opportunity to use Artificial Intelligence to build a smart and independent robot like a human with the feature of storing its own programming data and an automatic database on its device.

AUTOMATIC PAYMENT AUTHENTICATION

I got an automation payment project that can use bank accounts or e-wallets for users and then forwarded to service or product owners on a website page based on Node.js, Python (Flask/Django), or PHP (Laravel), building a database: PostgreSQL, MongoDB, or MySQL and security system: Data encryption (HTTPS, AES, RSA).

PERSONAL MANAGEMENT DATABASE

This project aims to build a structured database system to store and manage employee-related data, such as personal information, position, salary, work history, and attendance at several government agencies in Bengkulu Province.

REBUILDING & MAINTAINING DATA KEMENTERIAN PUPR BWS SUMATERA VII BENGKULU

Rebuilding the front view and taking part in maintaining the office data system and checking security regularly.

API FOR E-COMMERCE SYSTEM

After building the website and landing page I built an online ordering system for product management, user authentication, shopping cart and checkout then post for payment process. User Authentication System I worked on a user service to subscribe and access premium content at one of the gold shops in Bengkulu and built a user asset savings system using Node.js with Passport.js or Django.

MINI SOCIAL MEDIA API

I built a user registration system to create, read and delete posts or like or comment interactions powered by Node.js with Express or FastAPI.

UPDATE & KEEPING SECURITY PATCH OF TOKOPEDIA IN INDONESIA

Responsible for updating and maintaining the system database so that it no longer leaks.

UPDATE & KEEPING SECURITY PATCH UBER IN SINGAPORE

I was asked to update the consumer data security patch so that it is better protected.

Periode

2024 Jan - 2025 May

2024 Feb - 2024 Nov

2023 Feb - 2023 Oct

2021 May - 2021 Oct

2021 Jan - 2021 Aug

2019 Aug - 2020 Feb

Periode

2024 Jul - 2024 Sep

2024 Apr - 2024 Dec

2023 Dec - 2024 Feb

2023 Jul - 2023 Oct

2022 Feb

2021 Nov

2021 May - 2021 Oct

2021 Jan - 2021 Aug



CERTIFICATE

OF COMPLETION

Itronix Solutions certifies that

Muhammad Ferdiansyah

Has successfully passed the requirements for

**Python Programming
Professional Certification**
offered by Itronix Solutions

Karan Arora

Founder & CEO



Certification Date **05/18/2025**

Certification ID **IS/PY/23/1302
0**





Pemerintah Kota Bengkulu
DISPORA
Dinas Pemuda dan Olahraga

SERTIFIKAT PENGHARGAAN

Diberikan Kepada:

atas prestasinya sebagai:

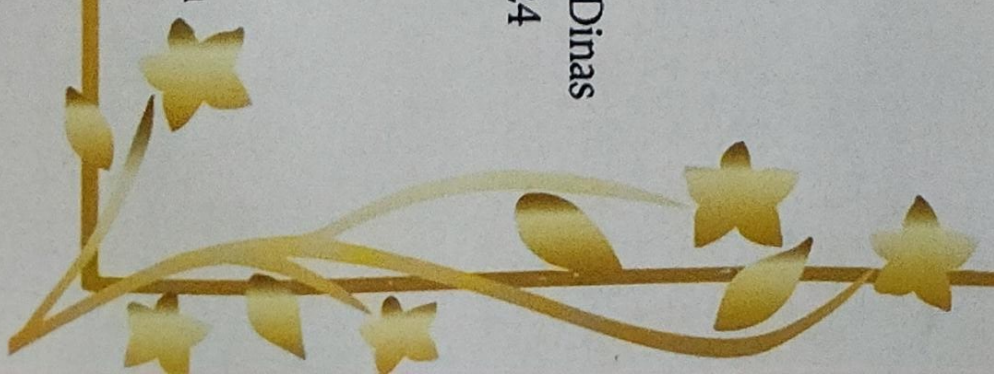
Juara 1

Dalam lomba "ROBOTIC Kreativesia" yang diselenggarakan oleh Dinas Pemuda dan Olahraga Provinsi Bengkulu pada 11 Agustus 2024



Ika Joni Ikhwan, SE., MM

Kepala Dinas Pemuda dan Olahraga Provinsi Bengkulu





SERTIFIKAT

Diberikan Kepada

Muhammad Ferdiansyah

Sebagai

**JUARA II THE BEST TECHNOLOGY
KATEGORI RANCANG BANGUN MESIN OTOMATIS BENCANA
TINGKAT MADRASAH ALIYAH (MA)**

PADA KOMPETISI ROBOTIK MADRASAH 2018
Depok Town Square Kota Depok Jawa Barat, 3-4 November 2018

Diselenggarakan Oleh
Direktorat Kurikulum Sarana Kelembagaan Dan Kesiswaan (KSJK) Madrasah
Direktorat Jenderal Pendidikan Islam
Kementerian Agama RI

Direktur KSJK Madrasah

A. Umbar

