

SYAHRUL BHUDI FERDIANSYAH

Gresik, Indonesia | syahrul4w@gmail.com | +62 857 5556 6422 | github.com/SyahrulBhudiF | in/syahrulbhudif/ | ryuko.my.id

Informatics Engineering student at Politeknik Negeri Malang with 2 years of experience in software development, focusing on Full-Stack Development with a stronger emphasis on backend. Experienced in frontend development using Next.js and TanStack Start with TypeScript, and backend development using TypeScript, Laravel, and Golang. Proficient in Linux environments, quick to learn new technologies, and adaptable to complex projects. Motivated to contribute effectively in collaborative teams while continuously improving technical expertise.

Work Experiences

PT Sinergi Informatika Semen Indonesia - Internship

Feb 2025 – Dec 2025

Fullstack Developer – Jakarta Selatan, Indonesia

- Designed and implemented a robust backend architecture with an emphasis on clean, reusable, and scalable code and refactored legacy code to solve bugs and security issues.
- Redesigned the database schema for better performance, scalability, and adherence to best data management practices, and implemented a dynamic role-based access control (RBAC) system at app level to enhance security and user flexibility.
- Integrated Nextcloud for secure, scalable cloud-based document storage, optimized database queries for faster data retrieval, and improved 70% overall system efficiency.
- Enhanced WordPress performance and visibility by implementing SEO optimization strategies, integrating heatmap analytics for user behavior tracking, and developing custom WordPress code solutions to extend functionality and improve user experience.

Oranji - Part Time

Sep 2024 – Aug 2025

Software Developer – Malang, Indonesia

- Developed efficient code and acted as a system analyst to align user requirements with technical solutions.
- Analyzed user requirements and translated them into software specifications and database designs.
- Led the development team, coordinating tasks and ensuring smooth execution of processes.
- Implemented CI/CD with GitHub Actions, set up a Docker-based production environment, and optimized servers with Nginx and FrankenPHP.

PT Sthira Teknik Indonesia - Freelance

Jul 2024 – Dec 2024

Fullstack Developer – Yogyakarta, Indonesia

- Developed a comprehensive web platform to streamline the registration, management, payment processing, and administration of training sessions and seminars for healthcare professionals at RSUD Prambanan, Yogyakarta. This platform improves operational efficiency, simplifies participant management, and supports seamless administration for the hospital's professional development initiatives.

Projects

Dual-Cam Studio - Undergraduate Thesis Research Project

Dec 2025 – Present

Fullstack Developer

- Developed a research-oriented web application for micro-expression and anxiety studies, featuring dual-camera video capture (Intel RealSense and standard webcam), a dynamic CMS-style questionnaire system, and an admin dashboard for dataset management and analytics. Implemented scalable frontend architecture using TanStack Start, managed complex form flows and state, and integrated real-time video capture and data visualization to support experimental and assessment-based workflows.

TechStack : TanStack Start, ReactJS, TypeScript, Supabase, Drizzle, Effect, Python, Websocket, TailwindCSS, BiomeJS

Sobatbangun.com - PT Sinergi Informatika Semen Indonesia

Aug 2025 – Dec 2025

Frontend Developer

- Developed custom components and integration patterns on top of WordPress using ACF and shortcode-based logic to enhance flexibility and maintainability. Analyzed user interaction data from Microsoft Clarity and Mouseflow to improve UI structure, prioritize key elements, and reduce dead clicks.

TechStack : Wordpress, Microsoft Clarity, Mouseflow

Page Capture - Personal

May 2025 – Aug 2025

Fullstack Developer

- PageCapAPI is a web page screenshot API built with Go, designed to capture high-quality snapshots of web pages programmatically. It follows Domain-Driven Design (DDD) and Hexagonal Architecture to ensure a clean separation between business logic and infrastructure. The API supports customizable options such as output size, device type (mobile or desktop), and capture delay, providing flexibility for various use cases.

TechStack : NextJS, TailwindCSS, Go Gin, Gorm, PostgreSQL, Redis, BiomeJS, Docker, JWT

Document Management System - PT Sinergi Informatika Semen Indonesia
Fullstack Developer

Feb 2025 – June 2025

- Initially contributed to maintaining and improving the existing legacy codebase by fixing stability and performance issues. Proposed and implemented a full system rewrite upon the manager's approval to achieve a cleaner, more scalable, and maintainable architecture. Rebuilt core backend and frontend components, integrated Nextcloud for secure cloud storage, optimized database performance, and developed Metabase dashboards.

TechStack : Laravel, ReactJS, Inertia, Typescript, PostgreSQL, Redis, Docker, Nextcloud, Metabase

Gu Ru Studios Carya Course - Oranji

Jan 2025 – Maret 2025

Backend Developer, System Analyst, & DevOps

- Developed CMS and optimized backend services for a tutor booking platform connecting students with professional tutors for private and group lessons. Implemented secure authentication and real-time class scheduling, improved data models for scalability and transparency, and containerized the application with Docker for consistent deployment across environments. Configured Nginx and FrankenPHP to ensure reliable performance and maintainable DevOps workflows.

TechStack : Laravel, ReactJs, Inertia, TypeScript, MySQL, TailwindCSS, Docker, Nginx, FrankenPHP, Linux

Vexora - Politeknik Negeri Malang

Aug 2024 – Dec 2024

Backend Developer & Machine Learning Engineer

- Developed a mood-based music recommendation system that uses facial emotion detection to generate personalized playlists. Built the backend API using Go Fiber for performance and scalability, and deployed the CNN-based emotion detection model through FastAPI. Implemented K-Means clustering for music matching and integrated Redis caching to improve response times.

TechStack : Flutter, Fiber Golang, FastAPI, Python, PostgreSQL, Redis, Docker, CNN, Tensorflow

Web Training Healthcare Professionals - PT Sthira Teknik Indonesia

Jul 2024 – Dec 2024

Fullstack Developer

- Developed a web platform for registration, management, and administration of training and seminars for healthcare professionals at RSUD Prambanan, Yogyakarta.

TechStack : Laravel, ReactJs, Inertia, TypeScript, MySQL, TailwindCSS

Education

Politeknik Negeri Malang - Malang, Indonesia

Aug 2022 - Jul 2026 (Expected)

Bachelor Degree in Informatics Engineering 3.83/4.00

- KIPK outstanding students and education affirmation at State Polytechnic of Malang 2023
- Develop knowledge of critical thinking and problem solving

Organisation Experience

Workshop Riset Informatika - Malang, Indonesia

Head of Web Developer Division

Feb 2024 - Jan 2025

- Led the Web Developer Division at Workshop Riset Informatika, overseeing strategic planning, resource allocation, and the successful execution of a web development miniclass. Managed a team of skilled professionals to ensure high-quality outcomes and project success.

Web Developer Mentor

Oct 2023 - Jan 2025

- Embarked on a new and exciting journey as a mentor in the field of website development, guide 100+ mentee and inspire the next generation of web developers.
- Entrusted with the responsibility of guiding aspiring web developers, providing them with support, insights, and encouragement to help them succeed in their educational and professional pursuits.

Certificates & Courses

- Implement Load Balancing on Compute Engine Skill Badge** | Google (Sep 2024)
- Google Cloud Computing Foundations: Cloud Computing Fundamental** | Google (Mar 2024)
- Google Cloud Computing Foundations: Infrastructure in Google Cloud** | Google (Sep 2024)

Skills

- Soft Skills:** Problem Solving, Integrity, Team Working, Multitasking, Adaptability, Communication
- Development:** Experienced in building applications using NextJS and Tanstack Start with TypeScript, as well as backend development like Laravel, Golang, Laravel,Typescript.
- Database Management:** Skilled in MySQL and PostgreSQL for creating, managing, and optimizing relational databases, and experienced in using Redis for caching to improve application performance.
- Containerization:** Familiar with Docker for containerization tasks and creating isolated environments.
- Version Control:** Experienced with Git for version control and collaborative workflow management in development projects.
- Operating Systems:** Experienced in using Fedora Linux as a primary development operating system.