# Rifialdi Faturrochman

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### **SUMMARY**

A detail-oriented professional with a strong background in software engineering and machine learning. Having gained experience as a Project Lead, System Analyst, Software Engineer, and Machine Learning Engineer in various software projects, with a solid understanding of the software development life cycle, technical programming skills, and team collaboration abilities. Now, as a graduate, focusing on expanding a career by leveraging expertise to deliver impactful solutions, actively contribute to achieving the company's goals, and continuously learn and grow.

#### **EDUCATION**

# Politeknik Enjinering Indorama

Purwakarta, West Java

 $\textit{Bachelor of Applied Computer Science in Software Engineering Technology Major} \ (S.Tr.Kom)$ 

2022 - 2025

• **GPA:** 3.90 / 4.0

• **Relevant Coursework :** Software Analysis & Design, Object Oriented Programming, Software Project Management, Enterprise Resource Planning, Web Programming, Android Programming, Desktop Programming, and Data Mining.

## **EXPERIENCE**

# Ministry of Higher Education, Science, and Technology

Jakarta

System Analyst & Backend Developer Support

Sep 2024 – Jan 2025

- Led a technical team of six members in designing and developing the SISTER Modul Sarpras and SISARPRAS systems.
- Analyzed project requirements and translated them into a fully functional system that met all specifications.
- Outlined existing business processes in BPMN to ensure alignment with system development.
- Designed system architecture using UML and documented technical specifications in SRS.
- Coordinated system testing to achieve a "Zero Error System" standard.
- Managed system development using the Scrum methodology for efficient project execution.

## Bangkit Academy led by Google, GoTo, and Traveloka

Indonesia

Machine Learning Cohort

Feb 2024 - July 2024

- Completed a comprehensive machine learning curriculum from basic to advanced using TensorFlow, accompanied by soft skills and English skills training.
- Led a team as the project lead for the capstone project, overseeing the development of a deep learning model that achieved 93% accuracy for the given dataset.
- Designed and analyzed problems, and determined the Minimum Viable Product (MVP) for the project.
- Collaborated with team members to create a project focused on food detection for preventing stunting during pregnancy.
- Successfully completed the program with Distinction, as one of the top 10% of graduates.

Compunova Purwakarta, West Java

Project Lead & Backend Developer

Mar 2023 - Present

- Led a team of 4 members in project development, creating timelines and principles to ensure projects are delivered on time and meet user requirements.
- Conducted user interviews to gather requirements, ensuring a clear understanding of project needs.
- Determine budgeting for projects, managing to complete around 7 application projects within the assigned budget.
- Design systems using UML standards for MVC application models, along with SRS following IEEE standards, and develop ERD designs for databases to ensure compatibility and efficiency.
- Developed backend functions for a web application, primarily using Laravel framework.

### ORGANIZATIONAL EXPERIENCE

# **Software Engineering Student Association**

Purwakarta, West Java

Head of Research and Development

Dec 2023 – Oct 2024

- Designed and collaborated to create 3 flagship programs focusing on community research and development within the internal environment (Study Program).
- Initiated and designed a community program called ByteBreaks as a platform for sharing and asking questions among members on the Discord platform.
- Coordinated with 3 departments to create synergistic and integrated programs.
- Led and organized a UI/UX design workshop at SMKN 2 Purwakarta, engaging around 50 vocational high school students as the event's chief organizer.

Developed and implemented a structured mentoring program to prepare students for IT competitions.

## **English & Techno Camp PEI**

Purwakarta, West Java

Field Coordinator Aug 2023

- Composed the layout for events at PT. Indo-Rama Synthetics Tbk.
- Organized and guided 200 participants on-site to the event venue.

## **Journalist Student Activity Unit**

Purwakarta, West Java

Staff of Human Resources and Development

July 2023 - Nov 2024

- Collaborated and developed a program in order to develop journalism knowledge for the general public.
- Enhanced members' expertise in journalistic aspects.

### **PROJECTS**

## **Stunting Detection Application with Early Intervention**

Purwakarta, West Java

Project Lead, Machine Learning Engineer, and Backend Developer

Aug 2025 – Present

- Secured research funding from the Ministry of Higher Education, Science, and Technology (2025 Batch 2) with a collaborative team of lecturers and students.
- Led a 2-member technical team, establishing project timelines with an agile framework (Scrum), designing system architecture, and coordinating closely with the principal researcher.
- Developed a machine learning classification model for stunting detection using real-world datasets to support health research initiatives.
- Designed and implemented backend services to integrate with the mobile application, ensuring scalable and reliable system performance.

#### DeLuSi (Deteksi Kelulusan Mahasiswa)

Purwakarta, West Java

Researcher, Machine Learning Engineer, and Full-stack Developer

Mei 2025 – July 2025

- Conducted a thesis research project focusing on student graduation prediction with a case study at the campus level.
- Built a machine learning model using real-world datasets, following the CRISP-DM methodology, achieving 92% accuracy with the Random Forest algorithm.
- Developed and deployed a machine learning API on cloud services for seamless integration with web-based systems.
- Designed and implemented a web-based application for student graduation prediction, equipped with early intervention and notification features for parents.

# **ASING!** (Awas Stunting!)

Bandung, West Java

Project Lead & Machine Learning Engineer

May 2024 – June 2024

- Led the development of a mobile application aimed at preventing stunting during pregnancy by providing nutritional guidance.
- Implemented a food classification model using TensorFlow and Transfer Learning, achieving 98% accuracy.
- Collaborated with a team to integrate image capture, food suitability prediction, and nutritional content analysis features.
- Managed project timelines and coordinated tasks to ensure timely delivery.

# SIMBARA (Sistem Peminjaman Barang & Ruangan TRPL)

Purwakarta, West Java

Feb 2024

- System Analyst & Full-stack Developer
- Designed the system using UML and ERD diagrams to ensure a clear and structured architecture.
- Designed user interfaces and implemented them into functional front-end components.
- Developed the back-end using Laravel, ensuring seamless integration with the front-end and robust system functionality.

## **SKILLS, COURSES & LANGUAGES**

**Technical Skills:** Python, Machine Learning (TensorFlow), UML, Business Process, Database (SQL), Git, Object Oriented Programming, System Design, MVC, PHP, Laravel, Java, Javascript (Node, Next, React), API, Postman, Android Programming (Kotlin), Agile Methodology(Scrum), Microsoft Office, Google Workspace, Project Management Tools (Trello).

**Soft Skills :** Problem-Solving, Critical Thinking, Growth Mindset, Analytical Thinking, Leadership, Attention to Detail, Project & Time Management, Communication, Team Collaboration, Adaptability, Resilience.

Courses: Crash Course on Python (Google), Machine Learning Specialization (DeepLearning.AI, Coursera, Stanford CPD, UVM), DeepLearning.AI Tensorflow Developer (DeepLearning.AI), TensorFlow: Advanced Techniques (DeepLearning.AI), Mathematics for Machine Learning and Data Science Specialization (DeepLearning.AI), Belajar Data Analysis Dengan Python (Dicoding), English for Business Communication (The British Institute).

Languages: Bahasa Indonesia (Native/Mother Tongue), English (Intermediate).