Muhammad Afief Abdurrahman

Software Engineer – Fullstack Web Application Developer – Machine Learning Engineer
Kota Bandung, Indonesia

Contact Information

(+62) 81347667932 | mafiefa.business@gmail.com | github.com/mafiefa02 | linkedin.com/in/mafiefa
Personal website: afiefabdurrahman.vercel.app

Profile / Summary

An undergraduate physics student experienced and passionate in software engineering and machine learning, especially in the development of fullstack web applications, using various stacks such as React.js, Next.js, T3 stack (Next.js + tRPC + Prisma) etc., along with Tailwind CSS and Typescript or Javascript. Interested and able to learn more about other new technologies or stacks whenever needed. With various volunteering experiences, I am also able to lead a team or projects well in an event or organization.

Education

Institut Teknologi Bandung (2021 – present)
Bachelor of Science in Physics
GPA 2.91/4.00 for 74 credits (expected to graduate in 2025)

Work Experience

Introduction to Computation Laboratory Assistant (September 2022 – December 2022)

Working for *Institut Teknologi Bandung*

- Supervised and guided a group of approximately 35 first year students in doing their practical work (once per two weeks) in computation algorithms with Python for the KU1102 Introduction to Computation course.

Volunteering Experiences

Fullstack Website Developer (July 2023 – September 2023)

Volunteering for *Intellectuelle Schule Himpunan Mahasiswa Fisika Institut Teknologi Bandung (HIMAFI ITB) 2023*

- Lead a team of two to ideate, design, and develop a learning management system website used by more than 200 people daily, using T3 stack (Next.js + tRPC + Prisma ORM + Tailwind CSS).
- Responsible for the whole backend architecture of the application, some of the frontend, and maintaining the system.

Frontend React Developer (July 2022 – September 2022)

Volunteering for *Orientasi Studi Keluarga Mahasiswa Institut Teknologi Bandung (OSKM ITB) 2022*

- Developed and implemented the website's user interface design from Figma using React.js along with Tailwind CSS and Chakra UI.

Frontend React Developer (June 2022 – July 2022)

Volunteering for *Perayaan Wisuda Juli Institut Teknologi Bandung 2022*

- Developed and implemented the website's user interface design from Figma using React.js along with Tailwind CSS and Headless UI.

Projects

Santri Tertib (SANTRIB) Web Application (July 2023)

Fullstack Web Application Development - Next.js, tRPC, Prisma, Tailwind CSS, MySQL

- Built and deployed a website for managing student's achievements and violation of school rules' history using the T3 stack (Next.js, tRPC, Prisma, and Tailwind CSS) and MySQL as the database. The school staff (or school admin) is able to create, edit, and delete records of a student's achievement or penalty using the website, with the support to upload image as a proof. Every school staff member, students, and student's parents can see the records on the website.

XVI Cinema – A Movie Ticket Booking Web Application (July 2023)

Fullstack Web Application Development - Next.js, Prisma, Tailwind CSS, PostgreSQL

- Built and deployed a website used to book movie tickets in a cinema using the Next.js, Prisma, Tailwind CSS, and PostgreSQL as the database. The website was built as a requirement to participate in COMPFEST Universitas Indonesia's Software Engineering Academy 2023.

Deployed on https://movie-ticket-self-eta.vercel.app/ using Vercel. GitHub repository can be found or accessed in https://github.com/mafiefa02/movie-ticket.

Analysis of A Driver's Face Using OpenCV to Detect Drowsiness to Prevent Traffic Accidents (May 2022)

Machine Learning and Internet of Things - Python, OpenCV, NodeRED, Arduino

- Developing the algorithm used to analyze the driver's face and determine the driver's drowsiness using OpenCV.
- Developing a system of internet of things utilizing a microcontroller installed with a Wi-Fi microchip to connect the computer running the detection algorithm to an alarm installed within a car, which is triggered based off the decision on the drowsiness of the driver.

Details of the project can be found in https://github.com/mafiefa02/sleepiness-detector.

PID Based Temperature Controller Using Cloud Computing Integrated with Arduino (May 2022)

Internet of Things - Python, NodeRED, Arduino

- Collaborated with a team of three to create a water temperature controller using Arduino and a cloud computing system.

Additionals

- **Technical skills:** Python, MySQL, PostgreSQL, Node.js, Prisma, React.js, Typescript, Javascript, Next.js, tRPC, Firebase, Spreadsheets (Microsoft Excel, Google Sheets), CSS, Tailwind CSS, Arduino, Tableau, Figma, Adobe Illustrator, Word Processing (Microsoft Word, LaTeX).
- **Certification:** Scored 77/100 with C2 Proficient Score in EFSET taken in 25 January 2021.
- **Languages**: English (C2 Proficient), Bahasa Indonesia (native).