Rifaz Muhammad Sukma

FullStack Developer and AI Researcher (freshgraduated)

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E X P E R I E N C E

Research Assistant   08/2024 - Present
Padjadjaran University ↗

1. AI-based Dental Health Research:

- Actively contributed to public health research with a focus on early detection of dental caries using artificial intelligence (AI).
- Developed AI models based on Faster-RCNN, YOLO-V8, and Detection Transformer to analyze caries based on ICDAS assessment.
- Using primary datasets obtained directly from the community as the basis for model development, ensuring relevance and accuracy on a national scale.
- Aiming to create a solution that can be widely used throughout Indonesia to improve early dental caries prevention.

2. Orthodontic Analysis of Skeletal Maturation

- Play an active role in orthodontic research with a focus on in-depth analysis of skeletal maturation using cephalometric x-ray images.
- Used rule-based methods with CVMS (Cervical Vertebrae Maturation Stages) guidelines to support accurate diagnosis and orthodontic treatment planning.
- Contribute to the development of technology-based approaches to improve the efficiency and effectiveness of analysis in the field of orthodontics.

The results of this research support technological advances in the field of dental health and orthodontics, and have a significant impact on public health nationally.

Software Developer   07/2024 - 12/2024
OrthoCVMS (Faculty of Dentistry, Padjadjaran University) ↗

development of innovative teledentistry software in the field of dental health, with a focus on analyzing skeletal maturity using a rule-based approach to support orthodontic treatment.

- Developed a technology-based system capable of automatically analyzing skeletal maturity in Cervical Vertebrae Maturation (CVM).
- Design and implement a rule-based algorithm to ensure analysis accuracy in accordance with orthodontic medical standards.
- Contribute to the optimization of the diagnostic process to support faster and more efficient clinical decision-making.
- Utilize technology to improve the accessibility and effectiveness of digital-based dental health services.

Tech Lead   05/2024 - 12/2024
Hibogi (Faculty of Dentistry, Jenderal Achmad Yani University) ↗

Lead the development of artificial intelligence-based teledentistry solutions in the field of dental health with various strategic and technical responsibilities:

- Strategic Planning: Designed business flows to ensure operational efficiency and developed workload management strategies to optimize expenses.
- App Development: Developed cross-platform applications for Android and iOS using React Native.
- Backend Development: Managed backend development with Express.js, utilizing SQL and Redis for efficient data management.
- Deployment: Professionally deploy applications using AWS, ensuring high performance and scalability.
- AI Innovation: Integrating AI technology to enhance user experience and support remote dental health diagnosis.

Chief Operating Officer
GoDentist ↗

08/2023 - 02/2024

Founders of GoDentist and currently serve as the Chief Operating Officer (COO). In addition to my main duties as COO, which include managing operations and ensuring the smooth running of various business processes, I also play an active role in the company's technology development. Specifically, I am responsible for the Backend Engineer section, where I contribute to designing, developing, and optimizing the backend system of the GoDentist application. This includes database management, API integration, securing user data, and ensuring the performance and scalability of the application in order to provide the best service to users.

Internship as Fullstack Developer
National Committee for Sharia Economics and Finance (KNEKS) ↗

07/2023 - 10/2023

Experienced as a Fullstack Developer in managing and developing dashboards for the Sharia Economic Data Center.

- Backend: Using Express.js to build API, PostgreSQL as database, and Docker for container management on KOMDIGI VPS server.
- Frontend: Utilizing React.js for user interface development, with Redux and Redis for efficient state management and high performance.
- Contributed to end-to-end integration, performance optimization, and ensured data security to industry standards.
- Enhance technical skills and understanding of fullstack technologies and their application in the Islamic economic and financial sector.

Independent Study
Bangkit Indonesia (grow with google) ↗

01/2023 - 08/2023

Studied cloud computing fundamentals to deploy applications, monitor operations, and manage enterprise solutions. Specializations included Google IT Support, Cloud Foundations, Cloud Engineering, Basic Web, Basic JavaScript, Back-End Development, Cloud Engineering, AI Introduction, Applied Machine Learning, and Application Development with Cloud Run.

Independent Study
Hacktiv8 Indonesia ↗

08/2022 - 12/2022

Focused on mastering React and React Native for web and mobile development. Learned essential skills, including component and state management, API integration, and best practices in front-end development, with hands-on experience in building modern, cross-platform user interfaces.

Laboratory Teaching Assistant
Jenderal Achmad Yani University ↗

08/2022 - 12/2022

Laboratory Teaching Assistant at Informatics Departement, Faculty of Science and Informatics Jenderal Achmad Yani

University

- Experienced in teaching Computer organization and architecture Practice to 40 students
- Experienced in teaching Programming algorithm Practice using C to 40 students
- Experienced in teaching WEB programming Practice to 40 students
- Experienced in teaching Database Practice using SQL to 40 students
- Experienced in teaching Artificial intelligence Practice using python to 40 students

Internship as WEB Developer
Saung Kode

01/2019 - 03/2019

internships conducted during vocational school in-depth about WEB from basics to using MVC Laravel (PHP) and Angular (JS)

E D U C A T I O N

Informatics Engineering
Jenderal Achmad Yani University - S.Kom. GAP 3.57

09/2020 - 10/2024

Award :

- Top 200 (Is-Chain, Investor StartUp Chain) in startup incubation organized by the Ministry of BUMN.
- Call paper at the digital library conference by the national library of Indonesia at eleven maret university.

- 2nd place (GodDentist) in startup incubation at rise academy by google gojek tokopedia and traveloka.

Organization :

- members of the student association in the department of community service.
- chief executive in the activities of community service activities at the Pelita Harapan Indonesia orphanage.
- chief executive in the activities of campus life briefing for new students (PKKMB 2022).
- chairman of the events division in the activities of the Student guidance of discipline and leadership training 2021-2022.

Speaker Experiences :

- Guest speaker at the 2023 new student debriefing: time management in organizational and academic activities.
- Guest speaker at the 2024 new student debriefing: time management in organizational and academic activities.
- Guest speaker at SMK student debriefing: hard and soft skills needed in the workplace.

software engineering
Vocational School 1 Cisarua

07/2017 - 07/2020

Award :

- National champion of video competition by im3 ooredoo

Organization :

- head of photography division

CERTIFICATES

Competency certification in programming and software development
National body for professional certification (BNSP)

03/2023 - 03/2026

Competency certification in office applications
National body for professional certification (BNSP)

07/2022 - 07/2025

SKILLS

Computer vision Processing

AI researcher and engineering

Signal and Audio Processing

Data Analytics

Cloud engineering

Express JS

React Native

React JS

LANGUAGES

English   Intermediate