

Aldo Septyan Praherda

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SUMMARY

Highly skilled and dedicated Fullstack Developer with more than 15 years of experience in designing and developing innovative web applications. Proficient in frontend and backend technologies, with a strong track record of delivering high-quality software solutions. Possessing a deep understanding of software development methodologies and a passion for continuously learning and staying up-to-date with the latest industry trends.

SKILLS

Technical Skills:

- Programming Languages: Java, Go, Sass, JavaScript, Typescript, PHP, SQL, C++, C#, Python, Dart, CSS, HTML
- Mobile: React Native, Java for Android, Flutter
- Back End: Java Spring Boot, Golang, Express, Node.js, Django, .NET Core
- Desktop: Microsoft Visual C# / WinForm, Qt, Microsoft Visual C++ (MFC)
- CMS Development: Joomla!, Wordpress, Drupal
- Front End: Angular, HTML5, CSS3, React JS, Bootstrap, jQuery, Angular, Typescript
- RDBMS: Postgres, MSSQL Server, ORACLE, MySQL, MongoDB
- Version Control: Git, SVN
- Deployment: Docker, AWS, Heroku
- AI & Machine Learning: Convolutional Neural Networks (CNN), YOLOv8, OpenCV, Image Classification, Object Detection, TensorFlow, Keras, Flask (for model serving)
- Other Tools: Node JS, NPM, Gradle, Nginx, Jasper Report, Cursor

Certificates:

[Angular & Node JS - The MEAN Stack Guide \[2025 Edition\] \(udemy, 2025\)](#)

[Sequence Models \(Coursera, 2020\)](#)

[Convolutional Neural Networks \(Coursera, 2020\)](#)

[Improving Deep Neural Networks \(Coursera, 2020\)](#)

[Programming Mobile Applications for Android Handheld Systems \(Coursera, 2014\)](#)

[Programming Mobile Applications for Android Handheld Systems: Part 1 \(Coursera, 2015\)](#)

[Programming Mobile Applications for Android Handheld Systems: Part 2 \(Coursera, 2015\)](#)

WORK EXPERIENCE

Full Stack Web Developer at uinsatu.ac.id / Indonesia

May 2024 – present

Led the development of a scalable university management system serving thousands of active students, transitioning from a monolithic Laravel application to a robust microservices architecture using PHP (Silex REST) and React JS.

Key Responsibilities & Achievements:

- Designed and developed multiple microservices, including: Student academic module, staff management, payment processing, graduation tracking, student surveys, and scholarship administration
- Improved system performance and reliability by:
 - Migrating from Laravel to microservices, ensuring modularity and ease of maintenance.
 - Implementing RabbitMQ for asynchronous processing and efficient handling of high-traffic workloads.
 - Transitioning from MySQL to PostgreSQL for enhanced performance and scalability per microservice.
- Developed a PDDIKTI (national education data) exporter/importer using Go (Iris framework) to automate data integration with government systems.

- Built a class scheduling system using Genetic Algorithm implemented in .NET Core, optimizing room and lecturer allocation efficiently.
- Integrated reporting capabilities with JasperReports and ensured system robustness using Supervisor for service monitoring.

Full Stack Web Developer at [Groundup.ai](#) / Singapore

Dec 2022 – Apr 2023

- Developed Safety Monitoring Dashboard application: User module, Role Management module, Notification module, Vehicle management module, Video Streamer, Fleet management using Express JS and React JS with MUI
- Developed Machine Dashboard application: User Management module, Machine profile module, Alert module using Django REST and React JS with MUI

Freelance AI Developer at Mekavision - Brawijaya University: East Java / Indonesia

Aug 2021 - Present

- Developed an end-to-end intelligent bacteria detection platform combining AI, mobile interfaces, and RESTful services to support scientific research and clinical diagnostics.
- Designed and developed an end-to-end breast cancer detection solution combining computer vision, deep learning, and mobile accessibility to assist early diagnosis from medical images
- Designed and developed a smart fruit detection and counting system using deep learning and mobile-first workflows to support agricultural productivity and yield estimation.

Full Stack Web Developer at Vega10 : Texas / United States of America

Aug 2012 – Nov 2022

- Developed custom Joomla! site for Proceran Networks and integrated with marketing platform marketo <https://web.archive.org/web/20130729124647/http://www.proceranetworks.com/index.php>
- Developed custom Drupal7 site for Proceran Networks <https://web.archive.org/web/20150205233050/http://www.proceranetworks.com/index.php>
- Developed custom Drupal7 site for Panasas <https://web.archive.org/web/20130323171122/http://www.panasas.com/>
- Developed custom PHP application for Proceran Networks using Yii2
- Developed custom Wordpress site for [veriflow.net](#) using Advanced Custom Fields Plugin for WordPress and integrated with marketing platform act-on
- Developed custom Wordpress themes for [blastwave.com](#)
- Developed custom Wordpress themes for [engagepr.com](#)
- Developed custom Wordpress themes and custom plugin for [CharitiesHousing.org](#)
- Developed Hubspot website for Proceran Networks [proceranetworks.com](#)
- Maintained Hubspot site for [logichub.com](#)
- Developed Webflow site for Blastwave.io

.NET Developer and Server Administrator at Magicsoft-asia : Malang / Indonesia

Mar 2008 – Jul 2012

- Participated in development of flight training management software using ASP.Net Webform
- Developed clinic management system using Winform
- Developed clinic management system REST API using python and MongoDB
- Managed email server using SmarterMail
- Managed websites using Plesk
- Integrated Android device with Omron device
- Managed websites that hosted on Amazon EC2
- Developed websites using Joomla!, Wordpress and custom PHP

PROJECTS

POS System – Full Stack (Spring Boot + Angular)

- Built a full-featured Point of Sale (POS) system with a Spring Boot backend and Angular frontend. The backend, developed in Java 17, leverages Spring Boot 3.1, Spring Security with JWT for authentication, and Spring Data JPA with MySQL for database operations. RESTful APIs are documented using SpringDoc OpenAPI and automatically consumed by the Angular frontend via OpenAPI Generator, ensuring type-safe API integration.

- The Angular app, built with Angular 17, incorporates advanced UI components using PrimeNG, ag-Grid, and Bootstrap 5, with secure JWT-based login powered by @auth0/angular-jwt. This project showcases end-to-end full stack integration, automated client code generation, and modern architecture practices for scalable, maintainable retail solutions.

Technologies: Java 17, Spring Boot 3.1, Spring Security (JWT), Spring Data JPA, RESTful APIs, OpenAPI (Swagger), Angular 17, TypeScript, HTML5, CSS3, Bootstrap 5, PrimeNG, ag-Grid, MySQL, JPA/Hibernate, Lombok, OpenAPI Generator, RxJS, JWT, Maven

Github: <https://github.com/araneta/APOS>

TokoPOS – Mobile Point of Sale System (React Native + Node.js)

Built a modern, cross-platform mobile Point of Sale (POS) system from scratch, combining powerful backend services with a sleek mobile interface to streamline in-store transactions and inventory management.

- Frontend (React Native + Expo)
 - Developed a mobile-first POS interface with React Native (Expo) for both Web and Android
 - Implemented barcode scanning using the device camera via expo-barcode-scanner and supported manual barcode input fallback.
 - Built dynamic cart management and real-time order updates using Zustand state management.
 - Designed intuitive UI/UX with React Navigation, Vector Icons, Toast Messages, and ChartKit for analytics.
 - Implemented secure authentication using Clerk for React Native and Expo Secure Store.
- Backend (Node.js + TypeScript + Express)
 - Created RESTful APIs using TypeScript, Express, and Drizzle ORM for PostgreSQL.
 - Used clerk/express for secure API access and user management

Technologies: Express JS, React Native, Expo, TypeScript, Clerk, Zustand, neon.tech, Stripe, React Navigation

Github: <https://github.com/araneta/postoko/>

AI-Powered Breast Cancer Detection System (Flask + Flutter + YOLOv8)

Designed and developed an end-to-end breast cancer detection solution combining computer vision, deep learning, and mobile accessibility to assist early diagnosis from medical images.

- Built a RESTful API using **Flask (Python)** that integrates **YOLOv8** and **OpenCV** to detect breast cancer from uploaded images with high accuracy.
- Preprocessed and analyzed medical imagery using **OpenCV** to enhance model detection performance.
- Developed a cross-platform **Flutter** mobile application allowing users to capture or upload images and view detection results with clear visual feedback.
- Engineered smooth client-server interaction, securely sending images to the API and displaying bounding boxes and classifications in real-time.
- Ensured efficient image handling, model inference, and response time optimization for practical mobile usage.

Technologies: Python (Flask), YOLOv8, OpenCV, Dart (Flutter), REST API, Mobile-Computer Vision Integration

E-Meterai Integration for [SkillAcademy.com](https://www.skillacademy.com)

Developed a high-performance backend system to integrate PERURI's E-Meterai (official Indonesian digital stamp) issuance into SkillAcademy.com, a large-scale online learning platform with high daily traffic.

- Designed and implemented a robust Spring Boot REST API to generate and validate E-Meterai documents securely and efficiently.
- Introduced a connection pool management system to ensure stability and scalability during peak traffic, handling thousands of concurrent requests.
- Optimized performance and fault tolerance for third-party API communication with PERURI.
- Ensured data integrity and traceability using PostgreSQL for persistent storage and transactional consistency.

Technologies: Java, Spring Boot, REST API, Connection Pooling, PostgreSQL, E-Meterai Integration, High-Traffic API Design

SiTANDA

- Developed a Web Application that store and manage all official documents in the form of incoming and outgoing letters
- Developed a REST API to view the document on Android and send notification to Android app

- Developed Android App that can view the document and receive notification from server when there is a new document arrived

Technologies : Node JS / Express JS, Java for Android, Onesignal for push notification, PostgreSQL, Bootstrap

SIMAK

- Developed a Web Application to manage employees in local university and store documents of each employee

Technologies : Node JS / Express JS, PostgreSQL, Websocket

Bacteria Detector – AI-Powered Detection System

Developed an end-to-end intelligent bacteria detection platform combining AI, mobile interfaces, and RESTful services to support scientific research and clinical diagnostics.

- Designed and deployed a YOLOv8-powered REST API using Flask (Python) to detect bacterial presence in microscope images, with preprocessing handled via OpenCV for optimal model input.
- Built a cross-platform mobile application using Flutter, enabling secure user login, image uploads, and real-time display of detection results.
- Developed a user management module (authentication, authorization, user profiles) as a REST API service using Go (Iris Framework) for high-performance handling.
- Integrated PostgreSQL as the central relational database, ensuring data consistency between AI results, user actions, and application logs.
- Engineered seamless communication between frontend and backend systems, providing a fluid user experience for researchers and healthcare professionals.

Technologies: Python (Flask), YOLOv8, OpenCV, Dart (Flutter), Go (Iris), PostgreSQL, REST API, Mobile AI Integration

Algae Detection System Using AI Segmentation

- Developed a REST API using Flask (Python) integrated with YOLOv8 segmentation to identify and segment algae in uploaded images.
- Utilized OpenCV for image preprocessing to improve detection accuracy and ensure consistent input quality.
- Built a native Android application in Kotlin that allows users to securely log in, upload images, and view detection results with visual overlays and metadata.
- Ensured efficient end-to-end communication between the mobile app and the AI backend, with a focus on responsiveness and usability for field researchers or environmental engineers.

Technologies: Python (Flask), YOLOv8 Segmentation, OpenCV, Android (Kotlin), REST API, Mobile-AI Integration

Fruit Detector – AI-Powered Fruit Counting System

<https://mekavision.aldoapp.com/>

- Built a REST API using Flask (Python) and Mask R-CNN for instance segmentation to detect and count fruits from images of trees captured in the field.
- Integrated OpenCV for image preprocessing to optimize inference results and detection accuracy.
- Developed a cross-platform Flutter mobile app enabling field operators to securely log in, capture or upload tree images, and view the counted results in real time.
- Implemented seamless API communication with backend services and real-time visual feedback on detected fruit instances.
- Developed supporting backend services (user management, task tracking) using Go (Iris framework) with PostgreSQL for reliable and scalable data storage.

Technologies : Python (Flask), Mask R-CNN, OpenCV, Dart (Flutter), Go (Iris), PostgreSQL, REST API, Mobile-AI Integration

Other PHP Projects

<https://www.upwork.com/freelancers/~01d2386d569f9933ad>

I have been working on Upwork as a freelancer since 2012 and developed custom Wordpress themes, Joomla! Themes and custom PHP applications