#### Gilbert Zaini

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A computer engineering student with expertise in both IoT development and software development, which is proved by the experiences of successfully designing hardware components, along with developing computer vision models and various full-stack applications, with some having integrated ML models.

#### **Experiences**

# **Universitas Multimedia Nusantara** | August 2024 - January 2024 **Laboratory Teaching Assistant**

• Conduct laboratory sessions for the Image Processing course, focusing on the application of image processing techniques and development of image-based machine learning models using Python.

# **PT. Kurnia Ciptamoda Gemilang** | February 2024 – June 2024 Web Developer Intern

- Migrated 12 menus from the legacy KCG system to the new web application built with Angular
- Developed the back-end server for KCG Helpdesk with Express.js, Sequelize, and MySQL
- Took part in developing the front-end for KCG Helpdesk

#### **Projects**

# **MySalak (EPICS in IEEE)** | February 2024 – January 2025 **Lead Software Developer**

- Developed the front-end client of MySalak PWA with React and ChakraUI
- Developed the back-end server with Express.is, Sequelize, and MySQL
- Developed a Flask back-end to enable access to multiple ML models
- Dockerized the services of MySalak and handled the deployment with a VPS

# Implementation of UNet++ for Snakefruit Plantation Map Segmentation (Final Project) |

February 2024 – December 2024

#### **ML Engineer**

- Collected aerial image dataset with drone
- Labelled the captured dataset
- Developed an ML segmentation model based on UNet++
- Compared the performance of models with different backbones and pretrained weights configuration

#### NemaAPP | November 2023 – January 2024

#### **Back End Developer**

- Developed the application with Flask
- Integrated parasitic and non-parasitic ML model
- Made scripts to install and run the application locally for both Windows and MacOS

#### DiTag | September 2023 – December 2023

# Full Stack IoT Developer

- Designed the hardware schematics
- Programmed the ESP32
- Developed the front-end client with React.js and ChakraUI
- Developed the back-end server with Express.js, Sequelize, MySQL, MQTT, and WebSocket

# SIKEBAS Pamulang 25 | June 2023 – November 2023

#### **Full Stack Developer**

- Administered the MySQL database
- Developed migrations, models, controllers, and middlewares in Laravel
- Implemented export feature for all reports
- Developed the front-end client with Laravel Blade templates

# **Organizations**

#### **STUKM UMN 2023** | May 2023 – December 2023

# Lead Web Developer

- Initialized the website project with React.js, Express.js, and ChakraUI
- Distributed the workload to the team members based on the individual's ability
- Developed the voting form and its related APIs
- Handled the authentication, authorization, and session management
- Deployed the website using cPanel

#### Mr. & Ms. UMN 2023 | March 2023 – November 2023

# Web Developer

- Developed the website client with Next.js and ChakraUI
- Developed "Sponsor", "Media Partner", and "Pancala" page
- Developed "candidates" section in Home Page
- Developed "gallery" template component

### **Competitions**

#### **GEMASTIK XVII** | 2024

#### **Software Development Category Finalist**

- Competed in GEMASTIK, a prestigious IT competition held by the Ministry of Education, Culture, Research, and Technology of Indonesia
- Placed in the top 20 teams from over 600 teams nationwide in the Software Development qualification stage and advanced to the final round
- Presented MySalak, an application that is developed specifically to address real-world problems, to the judges at the final stage

#### Education

# **B.** Eng in Computer Engineering

Expected Graduation Date: June 2025

Institution: Universitas Multimedia Nusantara

Current GPA: 3.78/4.0

#### **Skills**

Technical Skills: HTML, CSS, JavaScript, TypeScript, PHP, SQL, Python, React.js, Next.js, Laravel, Angular, Express.js, Flask, Bootstrap, Tailwind, ChakraUI, PyTorch, TensorFlow, Docker, Git Soft Skills: Communication, Problem Solving, Critical Thinking, Leadership, Time Management Language Skills: Bahasa Indonesia - Native, English - Proficient

#### Language Skins. Danasa maonesia Trative, English Troi

# Certifications

#### EF SET English Certificate 81/100 (C2 Proficient)

Issuing Organization: EF Standard English Test (EF SET)

Date Earned: October 2023