Aldhaneka Aufa Izzat

8th February 2008 | Depok, West Java, Indonesia | aldhaneka@gmail.com

EDUCATION

MAS International TechnoNatura   September 2023 – Present

Class of '26 3.56 Average GPA, excelling in Mathematics, Chemistry, and Physics.

ORGANISATION

Senior High School's Student Council | *Secretary*   July 2025 – Present

Responsible for documenting meetings, managing council communications, coordinating event planning, coordinating event logistics, and maintaining official records.

Engineering Exhibition | *Event Lead*   June 2022

Arranged and organised exhibition event to showcase Elementary to High School students' projects in Engineering.

PROJECTS

2025 FIRST Tech Challenge Team #19829 | *Team Leader, Programmer*   Oct 2024 – January 2025
- 1st Place Winner Champion at Indonesia's National FIRST Tech Challenge Robotic Competition 2025 season.
- Consistent robot autonomous movement, scoring up to 16 points during autonomous, and implemented industry standard control and techniques including; PID Control, and FeedForward Control which plays an important role in accurate robot movement during autonomous by utilising feedback input from wheel encoder.

2024 FIRST Tech Challenge Team #19829 | *Team Leader, Programmer, Business Team*   Oct 2023 – April 2024
- 1st Place Inspire Award Winner, 1st Place Winner Champion, and 2nd Place Control Award in honour of consistent Autonomous and efficient robot system at Indonesia's National FTC 2024.
- Attended robotic competition FIRST Tech Challenge World Championship in Houston, Texas, United States.
- Secured $5000 USD sponsorship funds to attend the FTC World Championship in Houston, Texas, USA.
- Productionized over 3000 lines of code in Java. Utilised industry standard control and technique for driver control and autonomous; PID Control. Implemented Machine Learning Object Detection using OpenCV and TensorflowLite to detect game objects in the FIRST Tech Challenge competition for robot's Autonomous.

Object Detection on NVIDIA Jetson Nano | *Programmer*   Jan 2023 – March 2023
- Implemented optimised Computer Vision using OpenCV along with YoloV5 Pytorch which achieved 60 FPS from 5 FPS in processing the video stream with the help of CUDA. High accuracy detection up to 93% of two objects. Reduced hardware & processing costs by more than $200 USD by utilising NVIDIA Jetson Nano.

Student Web Dashboard | *FullStack Engineer*   November 2022
- Managed industry standard architecture system flow including Encrypted Authentication using Bcrypt, JWT Auth, Relational Database using MongoDB, State Management using ReduxJS, and implemented NextJS.

LEGACY CERTIFICATIONS

Scientific Computing with Python | *FreeCodeCamp*   June 2023
Representing approximately 300 hours of Python Course & Works.

SKILLS

Programming Languages and Tech Stacks : Java, Golang, Python, Numpy, Pytorch, HTML, CSS, TailwindCSS, Bootstrap, JavaScript, TypeScript, Next.js, ReactJS, ShadcnUI, Vue.js, Nuxt, and Express.js.

Tools and Services : Google Analytics, Google Tags, Figma, Digital Ocean, Git, GitHub, MongoDB, PostgreSQL.