

HENDI SUPRIHONO

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SUMMARY

I am a graduate student with an **electronic engineering education** background. Looking for opportunities in the **electronic, hardware and automation/robotic field**.

EDUCATION

Bachelor of Electronic Engineering Education

Yogyakarta State University | September 2015 – January 2020

- Actived member in several communities (social organization and university robotic team)
- Studied basic-advanced electronic (analog-digital) and fundamental automation (robotics and electronic industry)
- **Awards:** Bidikmisi Scholarship Awardee, Outstanding Student in University (2017, 2019), Outstanding Student in Faculty (2016, 2017, 2018, 2019), and Cum Laude predicate (3.68 GPA). [\[transcript\]](#)

Audio and Video Engineering

Vocational High School 2 of Yogyakarta | July 2012 – May 2015

- Got top 5 in last 5 semester and average score in final exam 85.57/100
- Studied basic electronic (analog-digital), circuit design, electronic assembly, repairing electronic

WORK EXPERIENCE

Drone Engineer and Instructor – Full time

Agriculture Institute Yogyakarta | August 2020 – March 2023

- Designed and developed educational media for basic drone pilot
- Collaborated for developing drone spraying for educational
- Educated ±160 students about drone application for agriculture (control, spraying and mapping)

Robotics Teacher – Freelance

Al-Azhar Elementary School | August 2018 – July 2019

- Educated robotic fundamentals (construction/mechanic, basic electronic components and programming)
- Got trophies in national-international competition:
 - Third place in Taman Pintar Robotic Competition 2018 - Transporter Division
 - Third place in ROBOTECH Yogyakarta Muhammadiyah University 2018 - Transporter Division
 - First place in Robotic Olympiad Tirta Tamansari 2019 - Transporter Division
 - First place in Robotic Olympiad Tirta Tamansari 2019 - Analog Line Follower Division
 - Second place in MATE Remotely Operation Vehicle (ROV) ASEAN Region 2019
- **Award:** Outstanding Robotic Teacher

Maintenance Engineer – Intern

PT Multi Bintang Indonesia | July 2017 – August 2017

- Maintained production machine regularly and fixed for any machines/electronic problems

PUBLICATION & PROCEEDING

[1] Development of Inverse Kinematics Learning Media Using Hexapod Robot for Robotics Course. Published to J. Phys.: Conf. Ser. 1737 012035 [\[link\]](#)

[2] Smart Wallet Pickpocketing Detection Innovation of Light Sensor Implementation. Proceeding of National Seminar ELINVO, p.262-268 [\[link\]](#)

PROJECT

Tennis Stroke Analysis (2022)

- Conducted research under M. Izzuddin Mahali, Ph.D (cand.)
- Designed and assembled electronic system
- Based ESP32 and MQTT

FPV Drone (2021 – 2022)

- The project, FPV (First Person View) drone, aims to gain other experiences in electronic (built and assembled), besides for fun and filming

Egg Turtle Monitoring (2021 – 2022)

- Conducted research under my lecturer, M. Izzuddin Mahali, Ph.D (cand.)
- Designed and assembled electronic system (gateway-client)
- Based ESP32, serial, and Cloud Firestore database

Bird Tracker Monitoring (2020 – 2021)

- Conducted research under my lecturer, M. Izzuddin Mahali, Ph.D (cand.)
- Designed and assembled controller board (transmitter-receiver) and programmed the algorithm
- Based on ATmega, ESP32, serial and RF signal (LoRa) for communication data

Kinematics Learning Media (2019)

- My final project for my undergraduate thesis, published in the Journal of Physics. The purpose of the project is to simplify understanding basic kinematic in hexapod robot [1]
- Based on STM32, serial communication

Smart Wallet Pickpocketing Detection (2017)

- Conducted research under government program (Student Creativity Program/PKM), supervised by Bakti Wulandari, M.Pd [2]
- Designed and assembled electronic system and programmed the algorithm
- Based on ATmega, serial and RF signal (LoRa) for communication data

Fire Fighting Legged Robot (2016 – 2019)

- Developed electronic and program of Fire Fighting Legged Robot
- Solved the inverse kinematic of hexapod robot
- Designed controller board and sensor (sound detection, fire detection and color sensor) and sometimes mechanic parts
- Based on ATmega, STM32, serial communication
- Became leader for two periods (2017/2018 and 2018/2019)

AWARDS, SKILLS

Team Awards: First Place in Region III and Finalist in National Indonesia Robot Contest (2019), Finalist in Region III Indonesia Robot Contest (2018), Finalist in Region III and National Indonesia Robot Contest (2017), Finalist in National Student Creativity Program 30th (2017), Second Place in Region III and Finalist in National Indonesia Robot Contest (2016)

Technical skills: Electronic Design (Proteus, Eagle), Electronic Repairing & Assembly, Programming (C), Drone Pilot