SHELA AGA PEDRANANDA

+6285811161610 | shelaagaps@gmail.com | https://linkedin.com/in/sheganda | Portofolio
Gresik, East Java

Detail-oriented automation engineer with hands-on experience in industrial control systems, PLC & SCADA programming, and electrical maintenance. Proven success in improving system efficiency by up to 9% during internship projects. Eager to drive process optimization in manufacturing environments through data-driven automation solutions.

Skills

- Automation & Control: Siemens (TIA Portal, S7-1200,), Schneider (EcoStruxure), Omron, PID control, response analysis
- HMI & SCADA: Siemens, Weintek, Schneider HMI, CIMON SCADA
- Industrial Communications: PROFINET, Ethernet, Modbus RTU/TCP, Fiber Optic
- Data & Tools: MATLAB/Simulink, Python, basic PCB design, simple GUI
- Languages: Indonesian (fluent), English (intermediate, TOEFL 477)
- Soft Skills: teamwork, problem solving, adaptability, time management

Education

Institute of Technology Sepuluh Nopember - Indonesia   Aug 2021 – Aug 2025
Bachelor of Applied Science in Electrical Automation Engineering, GPA 3.49/4.00
Thesis: Pressure Control for Pneumatic Conveyor Using PID and VFD - focused on setpoint tracking for stable pressure.

Work Experience

PT Indofood Sukses Makmur Tbk Bogasari Flour Mills - Surabaya   Nov 2024 – Jan 2025
Automation Intern
- Developed PLC with VFD for pneumatic conveyor, improving efficiency by 9%.
- Performed maintenance & troubleshooting on automation machines across 3 lines.

PT Multi Daya Mitra - Sidoarjo   Nov 2023 – Oct 2024
Junior Automation Intern
- Delivered Gas Detector EWS (PLC & HMI) across 10 storage units, improving safety compliance and response.
- Designed CIMON SCADA for SWRO system based on client requirements.
- Implemented power monitoring for the E-RTG project, enabling data-driven load balancing and reporting.

Academic Project - Surabaya
 Face Recognition-Based Presence System   Mar 2023 – Jul 2023
- Built a webcam-based face-recognition attendance system in Python, developed the GUI in PyCharm.
- Ran trial and error iterations to improve detection accuracy and application stability.

STM32F446 Nucleo-64 Microcontroller Learning Module   Sep 2022 – Jan 2023
- Designed and validated PCB, integrated sensor/actuator interfaces on the subsystem.
- Developed firmware for STM32F446 Nucleo-64, staged functional tests and iterative debugging.

AtMega 8535 Microcontroller Learning Module   Mar 2022 – Jul 2022
- Designed and analyzed PCB, integrated and maintained the electrical subsystem.
- Programmed the ATmega8535 module using AVR/CVAVR, iterated until firmware was stable.

PT Maju Teknik Utama - Gresik   Sep 2019 – Jan 2021
Technician (Projects & Service)
- Installed and maintained water chiller systems.
- Conducted preventive and corrective maintenance and troubleshooting on chillers and screw compressors.

PT Indofood Sukses Makmur Tbk Bogasari Flour Mills - Surabaya   Jul 2018 – Sep 2018
Electrical Intern
- Assisted electrical installation, control wiring
- Equipment maintenance to support continuous operations.

Leadership & Activities

Student Association, Dept. of Electrical Automation (ITS) - Surabaya
Jan 2024 – Dec 2024
Staff (Internal)
• Managed welfare information, scholarships
• TOEFL communications, organized sports activities.

World Robot Olympiad - Surabaya
Apr 2023 – Aug 2023
Robo Mission Senior Staff
• Planned, coordinated, and executed competition logistics for 50+ teams.

Robokidz Robot Olympiad - Surabaya
Aug 2022 – Feb 2023
LEGO Competition Staff
• Organized and managed the LEGO robotics competition for 20+ teams.