SHELA AGA PEDRANANDA

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

Fresh graduate in Electrical Automation Engineering with hands-on experience in PLC, SCADA, and HMI. Proven record in improving industrial system efficiency through projects and internships. Eager to contribute to automation and process optimization in manufacturing industries.

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.

Face Recognition-Based Presence System (Semester 4) - Surabaya Mar 2023 – Jul 2023
Projects Based Learning
• 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 (Semester 3) - Surabaya Sep 2022 – Jan 2023
Projects Based Learning
• 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 (Semester 2) - Surabaya Mar 2022 – Jul 2022
Projects Based Learning
• 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.

Skills

• Automation & Control: Siemens (TIA Portal, S7-1200,), Schneider (EcoStruxure), PID control, response analysis
• HMI & SCADA: Weintek, Schneider HMI, CIMON SCADA
• Industrial Communications: PROFINET, 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