# Phạm Ngọc Toàn

Hanoi, Vietnam

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## **EDUCATION**

# **♦** Hanoi University of Science & Technology

Oct 2013 - May 2015

Major: Automation and controlling engineering technology Major: Automation and controlling engineering technology

## **♦** Military Technology Academy

Oct 2017 - May 2019

Major: Automation and controlling engineering technology

## ACHIEVEMENTS & SKILLS SUMMARY

- Electrical Design: AutoCAD & EPLAN control-panel schematics
- Software & Web: HTML, CSS, JavaScript, TypeScript, Node.js, Express, React, Next.js
- SCADA & MES: Factory monitoring systems & IIoT architecture
- PLC Programming: Siemens, Mitsubishi, Keyence, Omron.
- Project Management: End-to-end delivery of multi-million-USD automation programs.
- Robotics & IoT: KUKA integration; Raspberry Pi, Arduino & ESP32 prototyping.
- IoT Development: Developed in-house IoT solutions using Raspberry Pi, Arduino, and ESP32.

## **WORK EXPERIENCE**

♦ Vinmanutech Feb-2024 - Now

Lead Automation Engineering

- Led \$35 M VinFast GA engineering projects in India & Indonesia coordinating cross-functional teams, suppliers & stakeholders
- Managed PLC, SCADA, and MES integration, including system programming.
- Designed electrical drawings and developed control system architecture.

♦ Vinfast june-2023 - oct-2023

Vehicle development program PMO

## Main responsibilities:

- Strengthened project management skills specific to vehicle development programs.
- Oversaw the implementation of electrical systems and software functionalities.
- Coordinated with cross-functional teams to ensure milestone delivery.
- Conducted risk assessments and part preparation within the automotive industry.

♦ Hamaden-Denso Feb-2023 - May-2023

Project suppervisor

## Main responsibilities:

- Led IIoT projects for factory automation.
- Developed and managed in-house IoT development teams.
- Collaborated with external suppliers for seamless project integration.
- Implemented agile practices and promoted team development

♦ Hexagon-Mi OCT-2021 - Jan-2023

Lead Automation Engineer

# Main Responsibilities:

- Managed a \$3M project from design to completion.
- Developed system and electrical designs and led cross-border collaboration with overseas engineers.
- Managed procurement, supplier relations, and onsite supervision of project deployment.

Solution privider

## Main Responsibilities:

- Designed environment monitoring web apps and developed PCBs to gather environmental data. D
- eveloped firmware for microcontrollers (Arduino, Raspberry Pi, ESP32).
- Implemented OpenCV for vision data processing using cameras.
- Built CO2 monitoring systems with real-time alerts using SIM800L modules.
- Worked on robot transfer systems for press and welding stations, developing PLC and HMI programs.

#### Weldcom industrial JSC

Feb 2017 - Jan 2021

#### **♦** Weldcom industrial JSC

Apr 2019 - Jan 2021

RnD

## Main Responsibilities:

- Developed a web-based MES system for factory status monitoring.
- Designed APIs for machine-to-PC communication and implemented IIoT protocols like MQTT and WebSocket.
- Programmed PLC drivers (Hostlink, Mitsubishi mcProtocol).

## **♦** Weldcom industrial JSC

Feb 2018 - APR 2019

Automation department

## Main Responsibilities:

- Collaborated with the team leader in designing, assembling, and installing the company's manufacturing machines.
- Designed a SCADA IIoT system to connect and monitor machines for the structural steel industry's factory.

## **♦** Weldcom industrial

Feb 2017 - FEB 2018

CNC cutting department

#### Main Responsibilities:

- Specialized in laser cutting technology for metal processing.
- Provided customer support and training on machine operations.
- Installed, maintained, and debugged machines on-site.

#### **♦** TOTO THang long vietnam

Dec 2015 - Feb 2017

Engineering and Utility

# Main Responsibilities:

- 1. Resolved production line errors and upgraded manufacturing processes.
- 2. Developed and adapted PLC programs for product changes.
- 3. Trained and managed a team of 5 workers for factory operations.
- 4. Proficient in Mitsubishi, Omron, Keyence, and Delta PLCs.

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