

# Boon Thu

## AUTOMATION ENGINEER

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### PROFESSIONAL SUMMARY

Automation Engineer focused on developing intuitive HMI interfaces, PLC (Siemens TIA Portal) logic, and AutoCAD instrumentation layouts. Proficient in DCS (Valmet DNA) and industrial robot simulation to drive operational efficiency and safety.

## Portfolio

### WORK EXPERIENCE

#### Undergraduate Tutor Assistant | 2026 Jan- Present

Institute of New Industry of Jyväskylä University of Applied Sciences

- Facilitated lab sessions for 30+ students, providing technical guidance on TIA Portal and HMI design principles.
- Debugged and optimized PLC ladder logic, FBD logic and HMI tag integration to ensure seamless communication between hardware and interface.

### EDUCATION

#### Bachelor of Engineering in Automation and Robotics | 2023-2027

Jyväskylä University of Applied Sciences

- Relevant Coursework: Programmable Logic Controller, DCS (Valmet DNA) ,HMI, Control Systems, Machine Vision, Industrial Instrumentation, Data network, Industrial Robots, R&D
- GPA: **4.67 / 5** Credits: 154

### SKILLSET

#### Automation & Control

- PLC: Siemens TIA Portal (Ladder, FBD), Cascade Control strategies.
- DCS: Valmet DNA (Water process control).
- Safety: Risk and hazard calculation using SISTEMA.

#### Engineering Design & Visualization

- HMI/SCADA: Advanced GUI design in WinCC.
- CAD: AutoCAD (2D/3D layouts).
- UI/UX: Figma (Interface mockups and prototyping).
- Simulation: Visual Components (Robotic workflows, AMRs, Cobots integration).

#### Programming & Data

- Languages: C# (Modbus TCP/IP integration), MATLAB (Modeling/Scripting).
- Instrumentation: Sensor measurement and data acquisition via LabVIEW.

### CERTIFICATE

- AI: Google AI Essentials Certified.
- IT Support: Google IT Support Certified (Troubleshooting, Maintenance)

## EXCHANGE PROGRAM

### **E<sup>3</sup>UDRES<sup>2</sup> Bootcamp 2025 – St. Pölten, Austria**

Theme: Creative Roots- Designing Experiences Inspired by Nature

- Co-developed a nature-inspired solution for regional climate and biodiversity challenges in collaboration with Natur im Garten
- Applied design thinking, rapid prototyping, and creative problem-solving in an international, multidisciplinary team
- Gained hands-on experience in sustainable innovation, intercultural collaboration, and human-centered design

## VOLUNTEER EXPERIENCE

### **AgriVenture BioCamp 2025 – Volunteer Junior Staff**

Jyväskylä University of Applied Sciences

- Supported event logistics by preparing the venue, setting up exhibition stands, and managing decorations
- Advised and guided international guests, contributing to smooth event coordination and a positive visitor experience

## LANGUAGE SKILLS

Burmese ( Native)

English (C1)

Finnish (A2)

Japanese (N4)