Kyaw Min Thu

Automation Controls Engineer

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SUMMARY

Controls engineer with 20+ years across offshore drilling, semiconductor fabs, EV/solar manufacturing, high-pressure R&D;, and large-scale fulfillment automation. Fluent in Rockwell, Siemens, and Mitsubishi PLC platforms; bridges hardware-level commissioning with Python-based data tooling.

TECHNICAL SKILLS

PLC / Control Platforms	Rockwell ControlLogix / CompactLogix, Siemens S7-300/1500, Mitsubishi FX, Omron
Programming	Ladder Logic, Structured Text, FBD · Python, SQL, C · LabVIEW
Systems & Protocols	VFDs, Servo Drives, Fanuc Robotics, NI CompactDAQ · EtherNet/IP, Modbus TCP, OPC UA, MQTT
Other	Electrical schematics, panel fabrication, safety interlocks, ATEX, SCADA/HMI, data acquisition

EXPERIENCE

Automation Engineer — Controls Lead
Mar 2025 – Present

C&W; Services / JLL · Amazon Fulfillment Centers

- Controls lead for Rockwell ControlLogix PLCs on conveyor and sortation systems across Amazon FC sites.
- Primary technical lead for Fanuc robot troubleshooting, commissioning, and program modifications.
- Built Python fault-trending tools to identify downtime patterns and reduce repeat failures.
- Commissioned conveyor inspection system integrating sensors, PLC logic, and HMI diagnostics.

Electrical Technician — Automation & Controls
Mar 2018 – Feb 2025

Energy Recovery Inc.

- Designed NI CompactDAQ / LabVIEW control systems for R&D; high-pressure pump and valve test rigs.
- Programmed Allen-Bradley PLCs (ControlLogix, CompactLogix); integrated Keyence vision into test workflows.
- Full lifecycle ownership: schematics, BOM, panel build, safety interlocks, installation, commissioning.
- Python + SQL data acquisition pipelines for experiment traceability and regulatory reporting.

Maintenance Technician — Automation & Controls
Oct 2015 – Mar 2018

Tesla Motors / SolarCity

- Supported high-volume EV and solar manufacturing automation (Fanuc robotics, Rockwell PLCs).
- Data-driven MTBF improvement programs; modified control logic for production startups and line expansions.

Field Service Engineer — Controls & Automation
Apr 2012 – Apr 2015

MHWirth (Singapore) Pte. Ltd.

- Led full PLC conversion of offshore drilling top drive (Mitsubishi → Siemens S7): I/O mapping, interlock logic, ATEX cabinet fabrication, and offshore commissioning.
- Tuned hydraulic PID loops and verified performance under live load conditions on active rigs.

System Engineer
May 2009 – Oct 2010

Hexcel Solutions Pte. Ltd.

- Designed and commissioned automated firefighter training systems for Singapore Civil Defence Academy; PLC programming and SCADA for fire, gas, and hydraulic control.

Associate Engineer — Computer Integrated Manufacturing
Jun 2005 – Dec 2008

Chartered Semiconductor Manufacturing

- Maintained CIM systems (IBM SiView) and factory automation data platforms in a 300mm wafer fab.

EDUCATION

BS Computer Science — California State University, East Bay

Diploma — Electronics, Computers & Communications Engineering — Singapore Polytechnic · Apr 2004