

ALEX (ZIYANG) LIANG

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LEAD CONTROL SYSTEMS / SCADA / PLC ENGINEER | TECHNICAL DELIVERY, COMMISSIONING & SYSTEM INTEGRATION

PROFESSIONAL SUMMARY

Lead Control Systems and SCADA Engineer with 10+ years of experience delivering automation, systems integration and commissioning across utility-scale BESS, renewable energy, mining and industrial projects in Australia and APAC. Experienced across the full project lifecycle, from design review and SCADA/PLC development through FAT/SAT, site troubleshooting, operational readiness and handover.

Combines hands-on engineering depth with technical delivery ownership across multidisciplinary teams, subcontractors and client interfaces. Applies Python automation and AI-assisted workflows to support coding, testing, technical research, documentation, data analysis and workflow improvement.

KEY SKILLS

SCADA · Control Systems · PLC · Commissioning · System Integration · Industrial Automation · Troubleshooting · FAT/SAT · Functional Safety · BESS · Technical Documentation · Stakeholder Coordination

PROFESSIONAL EXPERIENCE

FLUENCE ENERGY

Melbourne, Australia

Lead System Integration Engineer

Jul 2024 – Present

- Lead technical delivery of SCADA and control-system integration workstreams across utility-scale BESS projects ranging from 20 MW to 300 MW in Australia and Taiwan.
- Work across design review, system configuration, technical documentation, integration planning, commissioning support, troubleshooting and handover for projects including Mortlake (300 MW / 650 MWh), Dong Hai Jing (50 MW / 200 MWh), Latrobe Valley (100 MW / 200 MWh), Lincoln Gap (20 MW / 20 MWh) and Hazelwood expansion works.
- Resolve design gaps, integration issues and site-driven technical problems across internal engineering teams, subcontractors and client-facing scopes.
- Support broader project delivery by coordinating technical inputs across multiple stakeholders while helping move systems toward testing, commissioning and operational readiness.

GOLDWIND

Perth, Australia

SCADA Engineer (Concurrent contract engagement)

Feb 2021 – Jun 2024

- Delivered end-to-end SCADA systems across hybrid renewable energy projects, covering design, FAT/SAT, commissioning, documentation and handover.
- Delivered SCADA systems for Esperance (22 MW) and Kathleen Valley (95 MW) across design, implementation, commissioning, troubleshooting and client handover.
- Led SCADA audit and documentation rebuild work for White Rock Wind Farm (216 MW), helping establish a cleaner technical baseline for future upgrade activities.
- Worked closely with project teams, site personnel and technical stakeholders to keep delivery aligned with project requirements and commissioning needs.

PARADIGM ENGINEERS

Perth, Australia

Senior Control Systems Engineer (Concurrent contract engagement)

Dec 2021 – Nov 2023

- Delivered PLC and SCADA work across major BHP mobile-machine projects, covering development, testing, FAT/SAT, commissioning and technical documentation.

- Worked on functional-safety upgrade packages for Reclaimer 10 and Stacker 7, including PLC/SCADA development, FAT/SAT, documentation and commissioning activities.
- Delivered the broader PLC/SCADA development for Reclaimer 11 through to FAT stage, supporting a full mobile-machine control system package including functional-safety scope.
- Diagnosed and resolved software and hardware issues, improving delivery quality and system readiness across complex control system packages.
- Built 3,000+ lines of Python automation to improve coding efficiency, tag consistency and debugging workflows, lifting code and test accuracy from below 60% to above 95%.

DDC AUTOMATION

Perth, Australia

Control Systems Engineer (Concurrent contract engagement)

Oct 2020 – Dec 2021

- Delivered PLC, HMI and SCADA work across mining projects including FMG Eliwana and Rio Tinto Gudai-Darri, covering design, testing, FAT/SAT and commissioning.
- Handled troubleshooting, fault diagnosis and repair across project sites, while producing technical documentation and FAT/SAT material to support project delivery and compliance.
- Worked with project teams and clients across delivery and commissioning activities, supporting timely issue resolution and handover.

KOLLINS CORPORATION

Melbourne, Australia

Director – Property Development

Aug 2015 – Oct 2020

- Led a Melbourne townhouse development business across feasibility, financing and delivery for 10+ projects.
- Built commercial judgement and end-to-end project ownership later applied in engineering roles.

FORTESCUE

Australia

Process Control Systems Engineer

Sep 2012 – Jul 2015

- Supported PLC, SCADA and control system maintenance across FMG Christmas Creek Mine operations.
- Worked on conveyors, sample stations, train loading systems, and mobile machines.

BEC ENGINEERING

Australia

Graduate Control Systems Engineer

Dec 2010 – Sep 2012

- Built early PLC/SCADA, integration and commissioning experience in mining and port automation.
- Worked on ACS, Historian, SMS and related control systems.

EDUCATION & CERTIFICATIONS

Curtin University, *Bachelor of Mechatronics Engineering*

Cisco, *Cisco Certified Network Associate (CCNA)*

exida Asia Pacific, *Functional Safety Practitioner (FSP)*

TECHNICAL SKILLS

Controls & SCADA	Rockwell Studio 5000; GE Machine Edition; Schneider Unity Pro / Concept; Siemens
Platforms	TIA Portal; Citect SCADA; GE CIMPLICITY; Ignition
IT/OT Network	Modbus; DNP3; OPC UA; TCP/IP; Fibre Optics
Programming & Engineering Automation	Ladder Logic (LD); Function Block Diagram (FBD); Structured Text (ST); Python
Engineering Tools & Disciplines	Functional Safety; Instrumentation; Electrical Schematics; P&ID; AutoCAD; Linux; Virtual Machines
AI-Enabled Engineering Workflows	Applied generative and agentic AI for technical research, coding support, documentation, data analysis and workflow improvement

OTHER

Languages: English, Mandarin and Cantonese