



Automation and Controls Systems Engineer

Finisar is an innovative global company that designs and manufactures high-technology communication products for optical fibre telecommunication networks. We are the largest supplier of optical communication components and subsystems in the world.

Here at Finisar Australia, we have created a philosophy that thrives on R&D, continuous improvement, teamwork and partnerships within and beyond the organisation. We set high expectations and exceed them.

We are looking for a talented Control Systems engineer to join our Manufacturing Development team. The principal role is to develop the control systems software for the manufacturing and testing rigs used at Finisar. These rigs can range from simple systems for the control of optical and temperature instrumentation, to more complex PLC controlled systems with coordinated axis motion for precision pick and place applications and/or complex search algorithms for optical component assembly and alignment using the latest in stepper motor, servomotor, linear motor and piezo actuator technologies. In addition to this, you will have the opportunity to work with some of the most innovative equipment for UV curing, glue dispensing, Laser welding, etc. The controls work will consist of developing machinery PLC controls automation solutions using bechhoff TwinCAT3 PLCs with EtherCAT fieldbus for the connection of IO devices, precision motion systems, etc. The role will also include some electrical design work which will consist of the design of control cabinets, control boxes & other electrical systems including all relevant documentation such as design calculations and electrical schematics (Wiring diagrams, layouts, BOMs, etc.) in collaboration with the design team.

Key responsibilities

- Working with an engineering design team to produce instrumentation and control systems deliverables, including detailed design drawings, schematics and wiring diagrams, controls software, controls commissioning and validation, installation & test requirements etc.
- Development of PLC automation applications for production equipment / machinery including safety PLCs, Web HMI development, NCI g code files for sequence control, etc
- Develop software using software best practice principles including source control and CI/CD
- Implementation of new functionality and maintaining libraries of PLC objects
- Assist in general safety risk assessments and safety component selection/calculations to make sure that equipment build and safety functions are compliant to relevant Australian standards

- Design and develop control panels (using power supplies, relays, safety contactors, MCBs etc.) for the power distribution and control of PCBs, motors, optical, thermal, pneumatic, and other systems
- Generate layout and wiring diagrams of electrical panels/cabinets using Solidworks Electrical Schematics, whilst maintaining a library of components in Solidworks Electrical Schematics and PDM
- Help develop design guides and processes for the electrical and controls design of the control systems

Education and necessary skills

- Electrical, Mechatronics, or Software engineering qualification
- 2+ years control systems design experience
- Previous experience in developing IEC 61131-3 PLC controls automation solutions for machinery
- Previous experience in developing Web HMIs (HTML5, javascript) for machinery
- Good knowledge of industrial fieldbuses for machine control (E.g. Ethernet IP, TCP/IP, Serial, EtherCAT, ProfiNET, etc)
- Previous experience in electrical panel/cabinet design for machinery, ideally with gantry systems
- Good communication and reasoning skills while working as part of a team
- Ability to work with limited supervision while following directions and procedures
- Desire to push for continual improvements with the business

Desirables

- Experience and knowledge of Beckhoff TwinCAT 3
- Experience and knowledge of Electrical Schematic CAD software

If this sounds like you and you are looking to work for an industry leader with a down-to-earth yet professional environment, then this is the job for you! To apply, please send you resume to careers@finisar.com

We offer a competitive salary. Finisar Australia is a fully owned subsidiary of Coherent, a listed US company trading on NYSE under the symbol COHR.

The right to work in Australia is essential.

Finisar Australia / Coherent is an equal opportunity employer.