

## CURRICULUM VITAE

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**Jonathan** BEng(Chem Eng)  
Control System Engineer

I am a Control System Engineer with 20 years experience in the energy sector. I have experience in all aspects of control system replacement and commissioning with Siemens in-house Sydney design department. I have also worked on marine boilers and at the concrete precast factory for tunnel segments for Snowy 2.0.

I have worked in large engineering teams on Boiler and Turbine control upgrades and alone on smaller projects. As a Design and Commissioning Engineer, I

- Adapted old control logic to a modern control system whilst still meeting OEM specifications.
- Designed hardware enhancements such as replacing pressure switches with transmitters.
- Programmed and used an in-house Microsoft Access database for wiring design.
- Created design documents, work scope packages for installation, and O&M manuals.
- Loop tested and commissioned the new control system. This included some field work like lifting wires, making bridges and fault finding.
- Analyzed and adapted existing logic on running plants to help operation staff, electricians and engineers improve the process and keep the plant running.

As a control system trainer I mostly worked alone with a syllabus from the training head office in Germany. In this role, I

- Created, contextualised and delivered technical training for the engineering, maintenance and operation of various Siemens control systems: TXP, PCS7, and T3000
- Designed, maintained and upgraded the complete training control systems which included several computers, PLCs, I/O modules and transmitters.

I often worked as a part of a large team, but some of my individual achievements include:

- Successfully modernising the Vales Point water demineralisation plant over 3 weeks while still maintaining 50% production for two of the weeks
- Commissioning the control system on the Kemerton wet compression system. This was Siemens second worldwide implementation of this addition to gas turbines and I was able to add several enhancements which I sent back to the designers.
- Converting 120 WinCC trends to a format where the end-user was able to tweak them then more effectively. This was done using VBA scripts that I developed, reducing hours and improving accuracy.
- Delivering training at Yarnima Power Station at Whaleback mine in WA. This involved difficult logistics and some unfamiliar logic functionality. The customer was pleased and asked for additional training.
- Worked at the Segment Factory at Cooma keeping the plant running by diagnosing hardware failures and implementing fixes to safety problems discovered during production.

### Work History

- **Cooma Segment Factory (2022-2021)**  
PLC engineer for maintenance and minor upgrades
- **Alfa Laval Aalborg Ltd (2018-2020)**  
Control System Engineer
- **Siemens Ltd (1999 to 2017)**  
Control System Trainer  
Design and Commissioning Engineer (Control Systems)
- **TechComm Pty Ltd (1996 to 1999)**  
Mathematical Process Modeller

## **Education**

- **Bachelor of Engineering (Chem Eng, 1<sup>st</sup> class honours) (1992 to 1995)**  
University of New South Wales
- **TAE40110 (2014)**  
Certificate IV in Training and Assessment

## **Automation Software Experience**

- **Siemens Power Plant Automation**
  - T3000 version 2 to 8
  - TXP version 6
- **Siemens PCS7**
  - CFC and SFC control languages
  - WinCC HMI
- **Siemens TIA**
  - Ladder logic
  - Comfort Panel HMI
  - Version 14 to 16

## **Automation Hardware Experience**

- **Siemens S7**
  - S7-400 and S7-1500