

Cooper Wolfden

cooper.wolfden@icloud.com · (+61) 426 175 343

EDUCATION

Flinders University

Adelaide, Australia

Bachelor of Engineering (Electrical and Electronic) (Honours)

2019–2023

- *Thesis: Performance Augmentation using Biosignals*
- *Chancellor's Letter of Commendation (2020)*
- *President of Flinders Motorsport (2021–2022)*
- *Research publication:*
Wolfden, C and Zanj, A 2023, 'Development of a semi-automated undervine slasher', *Wine & Viticulture Journal*, vol. 38, no. 1, pp. 61-66.
link: <https://winetitles.com.au/wvj/articles/wine-viticulture-journal-volume-38-no-1-2023/viticulture-development-of-a-semiautomated-undervine-slasher/>

WORK EXPERIENCE

Adelaide Convention Centre

Adelaide, Australia

Audio Visual Technician

2018–Current

- *Technical setup of event according to client specifications*
- *Troubleshooting issues between complex interconnecting systems, thinking in terms of signal flow, quickly identifying positions of faults*
- *Professional client communication and problem resolution*
- *Operation of speciality equipment during event such as audio mixers, lighting controllers, vision switchers, etc.*
- *Following WHS in high-risk areas and around forklifts, scissor lifts, etc.*
- *Maintaining professional working relationships regardless of external pressures*

Flinders University

Adelaide, Australia

Student Ambassador

2022–2023

- *Maintaining professional demeanour while speaking to general public*
- *Communicating effectively with wide range of people from different backgrounds*

SKILLS

- **Programs:** Altium, Inventor, KiCad, ROS, LabVIEW, MATLAB, Simulink, MPLAB X, STMCubeIDE, Arduino
- **Languages:** Python, C, C++, JavaScript, L^AT_EX, Rust
- **Concepts:** Linux (Usage and Shell Scripting), Version Control, Build Systems, Assembly, Computer Architecture, Cloud Computing, Power Systems, SCADA, PLC Ladder Programming, Renewable Energy Systems, Analog Design, Embedded Systems

PROJECTS

Server-less application for synchronising spreadsheet roster to calendar using Google Cloud Platform 2019

- Written in Javascript
- Using App Engine
- Using gmail webhook that only runs when roster email is received

Rust application for filtering pricing information from RS Components for low cost rapid prototyping 2022

- Written in Rust
- Takes command line arguments and generates RS components search url
- Receives webpage and filters html to build objects from each search result
- Adds results to database, allowing advanced searches with custom filtering

LiDAR environment mapper and visualiser using ROS	2022
Custom PCB to receive and transmit CAN bus data	2022
<ul style="list-style-type: none"> • PCB has footprint of less than $30mm^2$ • Can be used to drive system outputs • Embedded into sensor/actuator enclosure for simple system integration 	
High current buck converter to drive 12V audio amplifier from 18V DC supply	2023
DMX lighting controller using Novation Launchpad	2023
Tri-output function generator with input voltage control	<i>Ongoing</i>
Digitally controllable linear regulator	<i>Ongoing</i>
Wireless projection mapping	<i>Ongoing</i>