

□ 0487 455 477 | repoockcorb123@gmail.com | www.brockcooper.au | / brock-h-cooper

#### Personal Profile

Results-driven professional with experience delivering customer-centred support services within tertiary education and advanced manufacturing environments. Proven ability to lead service delivery, manage complex enquiries, support students and stakeholders through end-to-end processes, and continuously improve customer experience. Strong communicator with a background in engineering, enabling clear translation of complex information into practical, accessible guidance.

#### **Education**

## **University of Wollongong (UOW)**

Wollongong, NSW

BACHELOR OF MECHATRONICS ENGINEERING (HONOURS CLASS II, DIVISION 1)

Jan 2017 - Jul 2022

• Experience with specialised electronic instrumentation and interfacing hardware: Designed, benchmarked and determined the performance of a low cost 3D printed 6 degrees of freedom robotic arm for a Thesis. Involved data acquisition using MATLAB.

**TAFE NSW** Campbelltown, NSW STATEMENT OF ATTAINMENT (CAD DESIGN AND MANUFACTURING)

Mar 2016 - Dec 2016

## Work Experience \_

#### The University of Sydney

Camperdown, NSW

TECHNICAL OFFICER - FACULTY OF MEDICINE AND HEALTH

Mar 2023 - Present

- Primary point of contact for students and stakeholders: Managed enquiries from researchers, students, and academic staff, triaging requests, setting expectations, and coordinating support through to resolution.
- Service delivery and operational coordination: Balanced multiple concurrent projects and support requests while maintaining timely, customer-focused service delivery.
- Cross-functional collaboration: Worked closely with technical, academic, and professional staff to align services with user needs and institutional requirements.
- Continuous improvement of support processes: Identified recurring issues and implemented improvements to workflows, documentation, and communication to enhance efficiency and customer experience.

**Austate Services** Minto, NSW

DESIGN AND MANUFACTURING ENGINEER CONTRACTOR

Dec 2021 - Mar 2023

- · Supervising, mentoring, and managing staff performance, ability to guide teams toward objectives: Designed custom trailers for heavy transport vehicles and coordinated projects. As part of the team, I managed the manufacturing of the projects and trained staff on various workshop equipment (e.g. CNC Machines, Brake Press, Cranes). I interpreted specialised client requirements into feasible solutions, optimising internal workflows for the team, and improving performance and customer service delivery.
- Customer requirement translation: Interpreted complex client needs and translated them into practical, achievable solutions while managing expectations, scope, and timelines.
- Stakeholder liaison and issue resolution: Acted as a key interface between customers, suppliers, and internal teams to resolve issues and maintain strong working relationships.
- Service and workflow improvement: Improved service delivery by optimising workflows, introducing new processes, and streamlining communication pathways.

Wollongong, NSW Jun 2021 - Sep 2022

MECHATRONICS ENGINEER

- **Prototype development:** Designed, manufactured and assembled bespoke cable camera car. During assembly, utilised rapid manufacturing techniques (e.g. 3D printing, CNC routing, CNC laser cutting).
- Schematic and printed circuit board (PCB) design: Used PCB design software (e.g. KiCAD) to create circuits for power and signal management. Interpreted and developed technical documentation (e.g. datasheets, schematics, bill of materials, operating guidelines)
- **PCB assembly:** Assembled various surface mount and through hole components. Exercised precise hand soldering with a microscope. Constructed DIY reflow oven for efficient assembly of surface mount devices.
- Interface/troubleshoot specialised electronic equipment and software: Used various testing hardware and related software (e.g. oscilloscopes, multimeters, simulators) for troubleshooting and circuit validation.
- Prepare, conduct and support tests of systems in the field and debug code: Designing and developing custom drone payloads for high voltage powerlines applications with a focus on software and hardware control, including field testing and troubleshooting.

### The University of Sydney (USYD)

Camperdown, NSW

MECHATRONICS PROJECT COLLABORATION (DRONE ON DEMAND)

Dec 2019 - Feb 2020

- **3D Printing:** Explored new 3D printing and manufacturing techniques of small unmanned aircraft wings using advanced materials.
- Hardware and Software Interfacing: Developed python interface layer to automate operation of 3D printers.

**Rise Above**Smeaton Grange, NSW

UNMANNED AERIAL VEHICLE (UAV) TECHNICIAN

Feb 2019 - Jan 2020

- **Engineering:** Designed and retrofitted custom payload solutions requiring CAD, programming (C++, Python) and interfacing numerous sensors (e.g. Arduino, Servos, Rotary Encoder).
- **Customer support:** Provided technical services and support to troubleshoot software and hardware for custom UAV builds and modifications for enterprise platforms. Dealt with difficult clients requiring communication and negotiation skills.
- **Equipment operation and maintenance:** Operated, serviced and maintained various 3D printers and other manufacturing equipment.

#### **Skope Group Comm-Klad**

Campbelltown, NSW

COMPUTER NUMERICAL CONTROL (CNC) MACHINE OPERATOR

Feb 2018 - Dec 2019

- Safely and autonomously operated 3-axis, automatic 7 tool CNC machine
- Handled bulky and expensive materials
- Required teamwork, communication and time management

# **Certificates and Professional Development**

- 2017: Alan Broady Memorial Prize (The University of Sydney)
- 2016: South32 Illawarra Coal Sustainability (University of Wollongong)
- **2016:** HSC Shape Exhibition (Powerhouse Museum)
- 2015: National WHS General Construction Induction Training (White Card)

#### References\_

To be provided upon request.