

JAKE PATTERSON

MECHANICAL ENGINEERING STUDENT

JAKEROBPAT@GMAIL.COM

LINKEDIN: JAKE-PATTERSONNZ
CHRISTCHURCH, NEW ZEALAND

PROFILE

Second year Mechanical Engineering student at the University of Canterbury, with a strong passion for design, manufacturing and problem solving. I am experienced in multiple CAD systems, as well as a range of fabrication methods. These skills are demonstrated in my portfolio, through an array of projects completed for the University and its clubs. I take pride in my work and am eager to get the opportunity to contribute towards more projects and develop my knowledge and skills further in a professional environment.

TECHNICAL SKILLS

- **Advanced Fabrication:** Precision lathe and mill, composite structures
- **General Fabrication:** 3D printing, laser cutting, welding, woodworking
- **CAD:** SolidWorks, Onshape, Fusion360
- **General Design:** Technical Drawing, dimensioning, descriptive drawing
- **Programming:** Python, basic C++ for microcontrollers
- **Electronics:** Microcontroller circuits, sensors, avionics systems, wiring and soldering
- **Engineering Practice:** Prototyping, iterative design, problem solving
- **Strengths:** Teamwork, collaborative design, leadership, organisation

EDUCATION

The University of Canterbury, 2024 – Current

Second year of mechanical with an intended minor in aerospace. Active member of UC Motorsport, helping with chassis and wheel fabrication. I am also active in UC Aerospace with the Australian University's Rocketry Competition (AURC) rocket, focusing on the airframe manufacture. Expected graduation in 2028.

St Andrews College, 2018 – 2023

NCEA Level 1 and 2 excellence endorsements and a Level 3 merit endorsement, additionally earning the Materials Technologies Award and academic excellence awards. Completed the Duke of Edinburgh's Bronze, Silver, and Gold Awards

EMPLOYMENT & VOLUNTEERING

I work at Bunnings Warehouse as a Trade Team Member. This role has strengthened my ability to communicate clearly and professionally with tradespeople and has given me practical knowledge of materials and products used in general construction, along with strong customer service.

Additionally, completed over 90 hours of volunteering through the Duke of Edinburgh's Award alone, primarily supporting the organisation of large community events. This volunteering developed strong teamwork, communication, and planning skills, while coordinating with vendors, volunteers, and the public.

HOBBIES & INTERESTS

I enjoy outdoor activities, including hiking and camping, mainly around the South Island of New Zealand. Participate in sports such as surfing, running, golf and hockey, developing teamwork and discipline. Outside of sporting activities, I love to travel and experience different cultures as well as enjoying woodworking in addition to the projects laid out in my portfolio.