KIERAN HITCHCOCK

MECHATRONICS ENGINEER

https://www.linkedin.com/in/kieran-hitchcock

Class 1, Full, Clean

EDUCATION

UNIVERSITY OF CANTERBURY
2016 - 2019
B.E. (Hons) - Mechatronics
First Class Honours
GPA: 8.4/9

TAURANGA BOYS COLLEGE/ ST PAULS COLLEGIATE
2009-2015
NCEA and GSE with Excellence

SKILLS

- **Programming -** Python, C, C++, Bash, Javascript, GitLab CI/CD, VHDL, PLC Programming
- **PCB Design** - Altium, TINA
- **CAD** - Solidworks, Fusion360
- **Computer Vision** - OpenCV
- **Website Design**
- **Mechanical Workshop Tools** - Mills, Lathes, Drill Presses, Arc Welding, and hand tools
- **Soldering**
- **3D Printing**
- **Harness Design/Manufacture**
- **Microsoft Office**

INTERESTS

- Sports - Squash, Surfing Hockey, Cricket, Volleyball
- Running
- Tramping
- Travel
- Hobby Projects

WEBSITE

www.kieranhitchcock.com

REFEREES

Available Upon Request

PERSONAL STATEMENT

I am a hard-working and self-motivated individual. I have a passion for learning and seeking innovative solutions with a strong commitment to the completion of tasks. I enjoy working in teams and believe the best results can be achieved this way. I have experience in high pressure situations with focus on achieving milestones. I am seeking a role in a challenging and varied position with the opportunity to improve as an Engineer.

WORK EXPERIENCE

ROCKET LAB – HITL/SYSTEMS ENGINEER *Sept 2020 – Apr 2023*

- Designed, built and operated Rocket Lab's Hardware-In-The-Loop (HITL) systems, primarily focused on the satellite section and the CAPSTONE mission.
- Managed Rocket Lab's software release processes. This required collaboration with a global team based in US, Canada and NZ during a highly developmental period.
- Automated tools critical for HITL operations of both satellite and launch vehicles.
- HITL Mission Operator for both satellite and launch vehicles.
- Designed and manufactured PCB for RTD simulation and implemented functional control code using both Python and C/C++.

BLUELAB – R&D ENGINEERING INTERNSHIP *Nov 2019 – Feb 2020*

- Analysed existing production process efficiency and explored opportunities for automation.
- Researched existing and future products to advance towards automated assembly.
- Collaborated with external company to discuss implementation of automation.

ROBOTICS PLUS – PROJECT ENGINEERING INTERNSHIP *Nov 2018 – Feb 2019*

- Automated test for component of Apple Packer prior to installation using C++.
- Sized PCB components to operate fans, LEDs and cameras on Apple Packer.
- Manufactured and tested PCBs, monitoring for failures such as thermal runaway.
- Tested various encoders and motor drivers for new stepper motor.

TRUSTPOWER – MECHANICAL ENGINEERING INTERN *Nov 2017 – Feb 2018*

- Sized mechanical bearings for a generator and created required CAD models.
- Analysed affect of degradation and repairs on dam efficiency.
- Started a database concept to track Trustpower's electrical assets and their relative importance to the company's electricity production.

ACHIEVEMENTS

- Received Rocket Lab's "Rookie of the Year" Award.
- Completed Christchurch Half Marathon with goals towards full.
- Received University of Canterbury's Awards:
  - UC Undergrate Entrance Scholarship
  - UC Engineering Top Achievers Scholarship
  - Vice Chancellor's Excellence Award (allowed study of philosophy courses separate to degree free of charge)
  - UC's Mechatronics Elevator Cup for best PLC controlled model elevator
- Completed Duke of Edinburgh Bronze Award.
- Boarding House Prefect and Captain of both 2nd XI Hockey and Cricket.