KIERAN HITCHCOCK

MECHATRONICS ENGINEER

Class 1, Full, Clean

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

EDUCATION

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

TAURANGA BOYS COLLEGE/ ST PAULS COLLEGIATE:
NCEA Level 1, 2, 3 - Excellence
NCEA Scholarships -
Physics, Calculus, Chemistry and Biology.
2011-2015

SKILLS

- **CAD** - Solidworks, Fusion360
- **PCB Design** - Altium, TINA
- **Programming** - C, C++, Python, Javascript, VHDL on FPGAs, PLC Ladder Logic
- **Computer Vision** - OpenCV
- **Basic Website Design**
- **Mechanical Workshop Tools** - Mills, Lathes, Drill Presses, Arc Welding, and hand tools
- **Soldering**
- **Microsoft Office**

INTERESTS

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

REFEREES

PERSONAL STATEMENT

I am a hardworking 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 am currently seeking a role as an engineer in a challenging and varied position. I would like to work in a role that enables me to utilise the skills learnt at university and with opportunities to learn and grow as an engineer.

WORK EXPERIENCE

BLUELAB – R&D ENGINEERING INTERN *Nov 2019 – Mar 2020*

- Analysed Bluelab's production process for their existing products.
- Research how the production capacity could be increased and explore the potential for automation in production lines.
- Collected information on how existing and future products could be better designed for automated assembly.
- Worked with Bluelab's Engineers and Engineers contracted from Motion Design to collate ideas to present to Bluelab leadership.

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

- Created a program in C++ to ensure a component of the Apple Packer is properly functioning before installation.
- Sized components for PCB running various fans, LEDs and cameras. These components included MOSFETS, resistors, capacitors and connectors.
- Manufactured and tested PCBs, monitoring for failures such as thermal runaway.
- Helped testing various encoders and motor drivers for a specified stepper motor.
- Assembled Apple Packers using technical drawings.

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

- Created a Solidworks model of an existing scaffolding platform used in the intake pipe of Trustpower's dams. This model was used as a guide for faster re-assembly.
- Analysed dam efficiencies looking for changes due to degradation and after repairs.
- Started a concept for an improved database to track Trustpower's electrical assets and their relative importance to the company's electricity production.
- Sized a new bearing for a generator then created a Solidworks model and drawing for manufacturing.

ACHIEVEMENTS

- Working in a team of 2, we won the Elevator Cup at university for programming the best functioning model elevator in the Mechatronics class. The model elevator was controlled using an Omron PLC.
- Granted the 'Vice Chancellor's Excellence Award' and chose to study three additional philosophy courses:
    - Human Nature (100 level)
    - Ethics (200 level)
    - Reason, Desire and Happiness (200 level)
- Completed the Duke of Edinburgh Bronze Award.
- Boarding House Prefect and Captain of both the 2nd XI Hockey and Cricket.