

KEVIN TANG

kevin.tang2648@gmail.com • +64221038405

[linkedin.com/in/kevintangnz/](https://www.linkedin.com/in/kevintangnz/) • kevintang.co.nz • github.com/KevTango

EDUCATION

The University of Auckland 2017 – 2020
BE(Hons) in Electrical and Electronic Engineering with Second Class Honours First Division

WORK EXPERIENCE

AoFrio/Wellington Drive Technologies, Auckland – Junior Development Engineer July 2021 – Present

- Designed and developed firmware for new automated product testers in a volume manufacturing environment using Qt framework and Python
- Created new SQL databases using PostgreSQL for production tester results
- Optimised code for existing Linux based Raspberry Pi 2/3/4 production testers resulting in fewer errors, faster testing time, and increased production throughput
- Provided on-site and on-call assistance to external manufacturers overseas to debug production tester issues, oversee production runs, and perform quality checks

KanDO Innovation, Auckland – Electrical Engineering Intern Dec 2020 – Mar 2021

- Conducted a proof of concept for non-contact glove sensing in bandsaw operation to prevent worker injuries
- Performed electrical subassembly work for Guardian Bandsaws

Cawthron Institute, Nelson – Cawthron Foundation Scholar Nov 2019 – Feb 2020

- Awarded the Sir Theodore Rigg Scholarship to support MBIE funded enabling open ocean shellfish aquaculture project
- Designed and developed an embedded system to track g-forces at different locations and log data for an offshore mussel farm
- Designed a PCB using Altium Designer and wrote code in Python to alter data logging frequencies
- Debugged electronic systems in the field and provided electronics training to scientists

PROJECTS

Light Spectroscopy Sensor App May 2021 – July 2021

- Designed a spectroscopy analyser to view the spectral response of different materials
- Integrated Qi charger into the spectroscopy analyser circuit to allow device to be powered wirelessly
- Built an app using Kotlin and Android Studio to control ESP8266 microcontroller and spectral sensor to plot readings on a graph

Bidirectional Underwater Wireless Charger – Part 4 Project Mar 2020 – Nov 2020

- Modelled and simulated IPT pads and electromagnet for AUV charging on COMSOL Multiphysics to increase battery endurance
- Designed a unidirectional and bidirectional dual active bridge (DAB) IPT circuit on PLECS

Personal Website Mar 2020 – Apr 2020

- Built and designed personal website with HTML+CSS using Foundation framework to showcase portfolio

TECHNICAL SKILLS

Programming Languages: C/C++, HTML+CSS, Kotlin, MATLAB, Python, Rust, VHDL

Software Knowledge: Altium Designer, Arduino IDE, Atmel Studio, COMSOL Multiphysics, Git, LaTeX, LTSpice, PLECS, Qt, Quartus, SQL, STM32CubeIDE, uPyCraft, Visual Studio Code, Zephyr RTOS

EXTRACURRICULAR ACTIVITIES AND CERTIFICATIONS

- 2019 and 2020 IEEE University of Auckland Student Branch Executive Committee Member
- 2019 Part III and 2020 Part IV EEE Class Representative for the ECSE Staff-Student Consultative Committee
- New Zealand General Amateur Radio Operator – Callsign: ZL1KTA

HOBBIES AND INTERESTS

- Chess (Part of the Papatoetoe Chess Club Committee)
- Field Hockey – Played for Papatoetoe High School's 1st XI (2013-2016)
- Following Formula 1 and basketball