# Curriculum Vitae of Po-Sheng Cheng

Bechalor of Science in **Bio-Mechatronics Engineering** and Bechalor of Arts in **Economics**, National Taiwan University (NTU).

### **Experiences**

#### Electromechanical Engineering Intern, Logitech

UX survey, mechanics design

- Feb. Jun. 2022
- I proposed a innovative keyboard switch, then conducted a UX survey with 50 interviewees to understand its target audience and lastly designed three working prototype to demonstrate the technology.
- Besides statistics with R for the UX survey, my engineering capabilities including modeling with Creo, SLA/3DP prototyping, electromagnet and microcontroller circuits design and stepper motor control were involved.

#### College Student Researcher, NTU

Software development, system integration

- Jul. 2021 Feb. 2022. A self-managed research project funded by Natinoal Science and Technology Council.
- I developed a novel spectral mapping system named HSI that integrates several electrical/optical components with LabVIEW software development environment.
- By researching the readout sequence of the EMCCD and optimizing the algorithm, I reduced the scanning time by 26%.
- Also involved Flutter UI/UX, C++, hyperspectral image processing, Electron Multiplying CCD and stepper motor control.
- I won the following awards with this project:
  - **2021 Technology Innovation Award** by CCMS, NTU (USD\$660)
  - College Student Research Creativity Award by National Science and Technology Council of Taiwan (USD\$660)

## Project Lead, Bio-Electromagnetics Laboratory, NTU

Electrical system integration, mechanics design

- May. 2020 Jul. 2022
- I designed a IoT machine to monitor the amount of bugs in farm fields with inhouse-designed controller board and mechanics.
- Technical aspect involved mechatronics, IoT with Arduino (XBee), PCB design (Altium), Python, SolidWorks, Raspberry Pi, MySQL.