Po-Sheng Cheng 鄭泊聲

National Taiwan University

Pursuing Master of Science, Graduate Insitute of Biomedical Electronics and Bioinformatics, College of EECS.
Acquired Bechalor of Science in Bio-Mechatronics Engineering.

Publication

TeleSHift: Telexisting TUI for Physical Collaboration & Interaction

2022. In ACM UbiComp/ISWC '22 Adjunct, https://doi.org/10.48550/arXiv.2209.08362

- This work recieved the **Best Demo at Ubicomp/ISWC 2022**.

- I laid out the system architecture of the presented prototype in this work with ESP32 microcontroller, potentiometers, DC motors, etc. I also implemented the power supply circuits and mechanical design of the prototype.

Experiences

Electro-mechanical Engineering Intern, Logitech

- Feb. - Jun. 2022

- I proposed an innovative keyboard switch and designed three working prototypes to demonstrate the technology involving electromagnet design, microcontroller circuits design and stepper motor control.

College Student Researcher, NTU

- Jul. 2021 - Feb. 2022. A self-managed research project funded by Natinoal Science and Technology Council.

- I developed a novel spectral mapping system that integrates several electrical/optical components like imaging sensors and motorized stages with LabVIEW and C++.

- By researching the readout sequence of the EMCCD and optimizing the algorithm, I reduced the scanning time by 26%.

- I won the **2021 Technology Innovation Award** by CCMS, NTU and **College Student Research Creativity Award** by National Science and Technology Council of Taiwan.

Project Lead, Bio-Electromagnetics Laboratory, NTU

- May. 2020 - Jul. 2022

- I designed an IoT machine to monitor the amount of bugs in farm fields with inhouse-designed controller board and mechanics.

- Technical aspect involved automatic control, IoT with Arduino (XBee), PCB design (Altium), Python, SolidWorks, Raspberry Pi, MySQL.