

Cheng Po Sheng: A self introduction

鄭泊聲

April 10, 2022

Outline I

① Education

② Experiences

③ Personalities

Ben Cheng 鄭泊聲

- Diversified interests and experiences.
- Strong technical skills.
- A good communicator.



① Education

② Experiences

③ Personalities

Education

National Taiwan University. Pursuing BSc/BA of

- Bio-Mechatronics Engineering
- Economics

in a double major program.

Expected to graduate in JUN. 2023.

EE related course

- Electrical, Electronics Engineering
- Engineering Mathematics
 - ODE, linear algebra, fourier transform, PDE
- Practical Data Structures and Algorithms
 - in Java
- Mechatronics I-IV
 - embedded microprocessor, signal conditioning, digital circuits, system integration
- BioMEMS Fabrication
- Intelligent Control
 - fuzzy control, genetic algorithm, neural network

ME related course

- Applied Mechanics I, II
- Strength of Materials
- Mechanism
- Design of Machine Elements
- Physical Chemistry
- Engineering Materials
- Fluid Mechanics
- Thermal Dynamics
- Heat Transfer
- Power Machinery
- Actuators
- Automatic Control

① Education

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③ Personalities

Mechanical Engineering Intern, Logitech

- Feb. 2022 - Jun 2022.
- Bringing electrical engineering skills to mechanical team to create new technology for keyboard.
- Involves ProE/Creo, R, SLA/3DP prototyping.

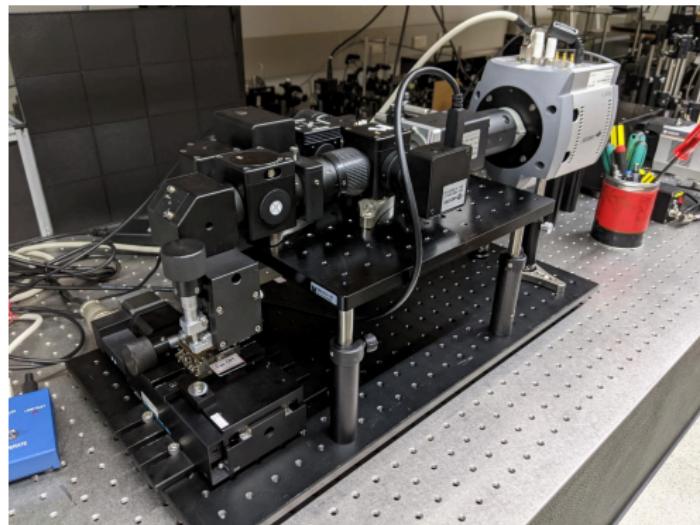


College Student Researcher, CCMS, NTU

- Jul. 2021 - Feb. 2022.
- Develop a novel spectral measurement and mapping system that integrates several components with LabVIEW.
Details linked here.
- Also involves Flutter/Dart, UI/UX, C++, optics engineering, hyperspectral image processing.
- The project won an Excellence Award (NT20,000) at 2021 CCMS Innovative Techniques Competition.

Some results from this project (links):

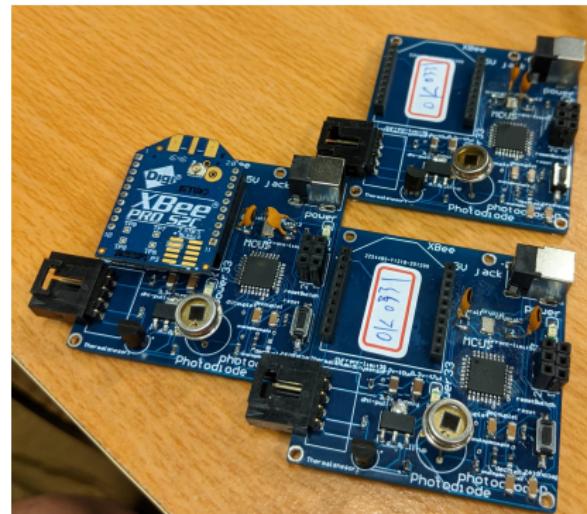
- Github Repos
- MOST Final report
- LabVIEW Source Code
- Documentation



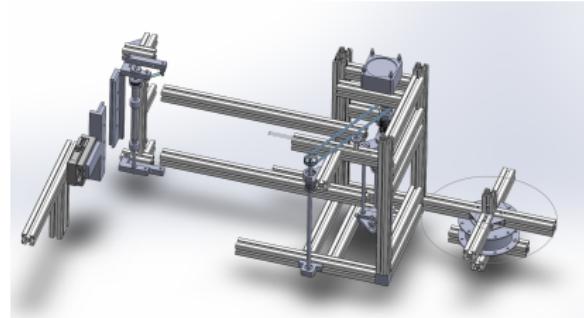
IoT Farm Field Pest Monitoring Device

IoT Farm Field Pest Monitoring Device

- A self-directed project.
May 2020 - present,
@Bio-Electromagnetics
Lab, NTU
- Design a IoT-connected
machine to monitor the
amount of bugs in farm
fields with self-designed
controller board and
mechanics.



- Involves mechatronics, IoT (XBee), PCB design (Altium), Python, SolidWorks, microprocessor, Raspberry Pi, MySQL.



Golden medalist, 19th Mobileheroes Award

Golden medalist, 19th Mobileheroes Award

- Category of 5G innovative application, (NT300,000) awarded by Industrial Development Bureau.
- Our team ARGO has developed a AR platform that utilize advanced image-based spacial recognition algorithm that enables complex AR experiences on personal mobile devices.
- My main contribution are UI/UX evaluation and design of the AR world for demo.

Championship, 2021 National Thesis Competition for College Students

- "Covid-19's Impact on Online Video Streaming Platform from The Perspective of Consumer Preference"
- In this work we found that most consumers didn't think the pandemic makes them more prone to subscription video services. By our statistics analysis, we found that only "family plan", which reduces price substantially, can make consumers prefer subscription OTT platform.
- Involves Matlab for statistics (Chi-square test for independence, Logistic regression).

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