# **Po-Sheng Cheng**

401-432-5576 bencer@outlook.com Online Portfolio Link Master of Industrial Design, Rhode Island School of Design, Jun. 2026 B.Sc. Bio-Mechatronics Engineering & B.A Economics, National Taiwan University (NTU), Jan 2023

Innovative prototype engineer with 5 years of diverse experience in cutting-edge product development.

## **Core Competencies**

- Electrical: Arduino, ESP32, Raspberry Pi, system interfaces (I2C, SPI) and PCB design
- Mechanical: CAD (SolidWorks, Fusion, Pro/E Creo), rapid prototyping (CNC, FDM/STL 3D Printing)
- Programming: C++, Java, Node.js (Express, React), Dart (Flutter), Python (PyTorch, NumPy), git
- Design: Rhino, Keyshot, Figma wireframing, Adobe Suite

# **Professional Experience**

Graduate Instructor, RISD Co-Works Lab, Sep. 2024 -

Providence, RI

Apprentice, Google Hardware Product Sprint, Jun. - Sep. 2024

Taipei, Taiwan

• Spearheaded development of an innovative HaaS lost and found platform, incorporating advanced kiosk technology and intuitive software service

### E-Lab Research Assistant, RISD Industrial Design, Feb. 2024 -

Providence, RI

- Led comprehensive workshops on electronics, Arduino/ESP32, RESTful API, web backend, and mobile app development
- Efficiently managed and optimized E-Lab component inventory

#### (Publication) TeleSHift: Telexisting TUI for Physical Collaboration & Interaction

Andrew Chen, Tzu-Ling Yang, Shu-Yan Cheng, Po-Sheng Cheng, Tzu-Han Lin, and Kaiyuan Lin. 2022. Recipient of the Best Demo Award at Ubicomp/ISWC 2022 Conference, https://doi.org/10.1145/3544793.3560323

- Engineered an innovative shape-transforming device with advanced 3D tangible user interface, revolutionizing group collaboration
- Architected comprehensive system infrastructure, integrating mechanical design and power supply circuits
- Pioneered design for manufacturability improvements, slashing assembly time by 80%

### Electro-mechanical Engineering Intern, Logitech, Feb. - Jun. 2022

Hsinchu, Taiwan

- Conducted in-depth user research, interviewing 50 students to drive innovation in gaming keyboard design
- Engineered sophisticated Arduino-based control system for precision motor and electromagnet operation
- Gained comprehensive understanding of New Product Introduction (NPI) process, fostering cross-departmental collaboration across ID, PM and EE

## College Student Researcher, NTU, Jul. 2021 - Feb. 2022

Taipei, Taiwan

- Pioneered development of cutting-edge spectral mapping system, integrating EMCCD with LabVIEW/C++
- Optimized core algorithm, achieving a 26% reduction in scanning time
- Honored with the 2021 Technology Innovation Award and College Student Research Creativity Award

Project Lead, Bio-Electromagnetics Laboratory, NTU, May. 2020 - Jul. 2022 Taipei, Taiwan

- Conceptualized and implemented advanced IoT system for precision monitoring of agricultural pests
- Established efficient git-based SolidWorks collaboration workflow and Notion-based BOM management system
- Leveraged expertise in automation, IoT (Arduino, XBee), PCB design (Altium), SolidWorks, and MySQL to deliver comprehensive solution