

Hua Liu (Flora)

hua.flora.liu@gmail.com | [LinkedIn](#)

Education

-  **National Taiwan University**, M.S. in Engineering Science Sept 2024-Aug 2026
[Conference](#): Load-carrying and stability improvement of a miniature ultrasonic piezoelectric plate motor
Coursework: Deep learning, Control Systems, Electronics Experiments, Elasticity
-  **National Cheng Kung University**, B.S. in Mechanical Engineering Sept 2020-Aug 2024
Research Topic: Development of SMC system for Vibration Control
Coursework: Robot Design, Vibration Control, Numerical Analysis

Skills

Coding & Data: Python, MySQL, Git, Docker, MATLAB, C++

Electronics/ Embedded: LTspice, Keil, LabVIEW, Simulink

CAD/FEA: Ansys, COMSOL, SolidWorks, AutoCAD

Instrument: Dicing Saw

Work Experience (~2 years)

-  **Amazon** Mar 2025-Present
Hardware Development Engineer / Product Integrity Team
- Supported hardware qualification across the NPI lifecycle (EVT, DVT, PVT, HVT to MP), ensuring product reliability and quality readiness
 - Built a MySQL database to manage large-scale test data and integrated it with Excel dashboards for efficient reliability monitoring and decision support.
 - Applied statistical reliability methods, including B10 life and MTTF analysis, to support risk-based quality decisions and reduce customer ARR
 - Collaborated with manufacturers and cross-functional teams to perform AI-assisted failure analysis on test and field-return data, driving corrective actions
-  **Delta Electronics** Jul 2024-Aug2024
R&D Engineer Intern/ Lab for Digital Twin-Based of Optimization
- Developed modular Python tools to automate product design and FEA workflows, enhancing design flexibility and reducing development cycle time
 - Collaborated with cross-functional teams to align user needs with tool functionality, improving usability and streamlining simulation-driven decision-making
-  **SGS Taiwan Inspection Technology** Sep 2023-Apr2024
Reliability Intern/ Reliability Laboratory
- Performed reliability testing using Ansys simulations and LabVIEW-integrated DAQ systems, applying knowledge of thermal, drop, and HALT methodologies
 - Analyzed test data from both physical sensors and DAQ systems, validating consistency and improving the accuracy of reliability reports
 - Developed proficiency in operating engineering software such as Ansys and LabVIEW, accelerating test workflows and enhancing data visualization

Activities & Extracurriculars

LinkedIn Personal Branding

- Built a 3,700+ follower network and shared career content, reaching over 48,000 views

TSMC Campus Ambassador

- Represented TSMC at NTU recruiting events and job fairs to promote TSMC branding

Personal Homepage Development

- Deployed a personal portfolio site using GitHub Pages to highlight technical projects