

Ying Kung

Personal Website: yourwebsite.github.io
Tel: (+886)976976829 | Email: evan08292001@gmail.com

EDUCATION

National Taiwan University (NTU) Taipei, Taiwan
Master in applied mechanics Jul 2025
GPA: 3.62
Relevant courses: Applications of Deep Learning in Science and Engineering; Principles and Experiments of Mechatronic Systems; Stochastic Control; Electronics Laboratory
National Yang Ming Chiao Tung University (NYCU) Jul 2023
B.S. in Civil Engineering

RESEARCH INTERESTS

Battery state analysis, electrochemical parameter estimation, and predictive modeling for energy systems; applications of artificial intelligence in robotics, autonomous systems, and electric vehicles

MANUSCRIPTS UNDER REVIEW

- **Ying Kung**, Yu-Hong Zhang, Chi-Jyun Ko, & Kuo-Ching Chen (2024). Predicting the onset of lithium plating by the full-cell voltage: A pseudo-P curve approach. *Energy Storage Materials*,

RESEARCH PROJECTS

Research on Frequency-Specific Modeling for Battery Parameter Identification Under Aging
Graduate Research | Advisor: Prof. Kuo-Ching Chen NTUIAM, TAIWAN. May 2025 - Present

- Developed physics-informed ML framework for electrochemical parameter estimation from partial EIS data.
- Implemented a two-stage Sobol sensitivity analysis to identify aging-sensitive parameters in distinct frequency bands
- Designed and trained band-specific Transformer models achieving sub-1% MAPE for SOH $\geq 75\%$, enabling real-time, onboard battery diagnostics

PROFESSIONAL EXPERIENCE

Liming Engineering Consultants Co., Ltd. Taiwan
Engineering Intern Jul 2022 — Aug 2022

- Supervised construction progress for schedule and safety compliance; reviewed blueprints, handled documentation, and coordinated with contractors.

Jiang Hong Cram School Taiwan
Part-time Problem-Solving Instructor Sep 2023 — Aug 2024

- Taught math and physics to high school students; developed tailored problem-solving strategies to improve analytical skills

AWARDS & SCHOLARSHIPS

- Honorable Mention, Student Paper Competition, 35th National Conference on Combustion and Energy — Top student research recognition in combustion and energy engineering — May 2025
- Dean's Award, College of Engineering, National Taiwan University — Top 10% of students in each department; eligibility requires submitting a master's thesis to an international peer-reviewed journal Aug 2025

SKILLS & INTERESTS

- **Languages:** Mandarin Chinese (native), English
- **Programming & Data Analysis:** Python, MATLAB, PyTorch; experience with NumPy, Pandas, scikit-learn, Matplotlib
- **Software and Tools:** COMSOL, LaTeX, Excel
- **Interests:** Fitness, Gaming