

PO-CHING HSU

☎ (240)-938-3868 | ✉ pchsu@umd.edu | 🔗 [linkedin.com/in/pochinghsu](https://www.linkedin.com/in/pochinghsu) | 🌐 <https://pochinghsu.github.io/>

EDUCATION

University of Maryland, College Park (UMD)	8/2021 - 3/2026 (Expected)
<i>Ph.D. in Mechanical Engineering</i> GPA: 3.9/4.0	Maryland, USA
National Taiwan University (NTU)	9/2015 - 6/2017
<i>M.S. in Mechanical Engineering</i>	Taipei City, Taiwan
National Taipei University of Technology (NTUT)	9/2011 - 6/2015
<i>B.S. in Energy and Refrigerating Air-Conditioning Engineering</i>	Taipei City, Taiwan

WORK EXPERIENCE

Foxconn Technology Group - Fii	11/2017 - 3/2021
<i>Thermal Engineer</i>	New Taipei City, Taiwan
<ul style="list-style-type: none">Developed thermal solutions for AI accelerator cards, projected for 1 million annual salesDeveloped high-performance server cooling solutions, enhancing thermal management in data centersOptimized thermal designs with CFD simulations and DoE methods, cutting manufacturing costs by 10%Conducted prototype testing and resolved thermal issues, improving components thermal margins by 5°C	

RESEARCH EXPERIENCE

Center for Environmental Energy Engineering (CEEE) - EEHP, UMD	8/2021 - Present
<i>Graduate Research Assistant</i>	Maryland, USA
<ul style="list-style-type: none">Performed VRF system field tests and developed machine learning models, reducing prediction error by 22%Developed heat exchanger models and HVAC system simulations using in-house software integrated with AI-driven modeling techniquesConducted experiments on oil retention and suction-line heat exchangers with low-GWP refrigerants to evaluate performance characteristics	

Energy and Environment Lab, NTU	9/2015 - 6/2017
<i>Graduate Research Assistant</i>	Taipei City, Taiwan
<ul style="list-style-type: none">Developed a piezoelectric air-breathing pump for a PEM fuel cell stack, increasing power flux by 20%, reducing volume by 68%, and weight by 76%Applied CFD simulations and experimental methods to optimize air-breathing pump airflow and enhance the performance of fuel cell stacks	

Two Phase Flow and Heat Transfer Enhancement Lab, NTUT	2/2014 - 1/2015
<i>Undergraduate Researcher</i>	Taipei City, Taiwan
<ul style="list-style-type: none">Developed and tested an impinging microchannel heatsink using two-phase dielectric fluid (FC-72) for efficient chip cooling, including CFD simulations to analyze flow fields of various jet orifice dimensions	

PUBLICATIONS

- Hsu, P.-C., Gao, L., Hwang, Y., Radermacher, R. (2025). A review of the state-of-the-art data-driven modeling of building HVAC systems. *Energy and Buildings*, 342, 115881. <https://doi.org/10.1016/j.enbuild.2025.115881>
- Hsu, P.-C., Gao, L., Hwang, Y. (2025). Comparative study of LSTM and ANN models for power consumption prediction of variable refrigerant flow (VRF) systems in buildings. *International Journal of Refrigeration*, 169, 55–68. <https://doi.org/10.1016/j.ijrefrig.2024.10.020>
- Ma, H., Hsu, Y., Hsu, P. (2017). A Novel Hybrid Actuator Driven Magnetically in the Bi-Cell PEM Fuel Cell Stack. *Metals*, 7(11), 453. <https://doi.org/10.3390/met7110453>

SKILLS

- Programming & Machine Learning:** Python, MATLAB, EES, C, PyTorch, TensorFlow, Keras, Sklearn
- Software:** SOLIDWORKS, LabVIEW, EnergyPlus, CoilDesigner, VapCyc, Flotherm, Ansys Icepak/Fluent