

Wei-En (Warren) Wang

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<https://wei-enwang.github.io/>

Education

Massachusetts Institute of Technology, GPA: 5.0/5.0, Expected Graduation: Feb 2024

Master of Engineering in Electrical Engineering and Computer Science

Massachusetts Institute of Technology Class of 2023, GPA: 4.9/5.0; Phi Beta Kappa, Sigma Pi Sigma inductee

Bachelor of Science in Electrical Engineering and Computer Science, Bachelor of Science in Physics

Experiences

Dolphi Learning, *Software Engineer*

June. 2023 - Sept. 2023

- Implement ways to finetune LLMs with Huggingface and PyTorch for a chatbot trained on private content
- Develop evaluation metrics and pipelines for chatbot-generated output
- Build a simple chatbot UI based on trained models

Data to AI Lab, Lab for Information & Decision Systems(LIDS), MIT, *Researcher*

Mar. 2021 - Present

- Conduct research on Explainable Machine Learning under Dr. Kalyan Veeramachaneni
- Develop explanation algorithms for time-series ML models through variations, algorithm applied to wind turbine failure predictions; paper in submission
- Collaborate on a PyPI library for explainable AI tools with Numpy, Pandas, Sci-kit Learn, and other ML, visualization python modules; paper in submission

Introduction to Machine Learning, MIT EECS, *Teaching Assistant*

Sept. 2022 - May. 2023, Sept. 2023 - Present

- Help run an ML course during 2022,2023 Fall by hosting office hours/lab sections and leading lab discussions
- Design and maintain homework google colab notebook files for the course

National Taiwan University Hospital, *Researcher*

July. 2021 - Sept. 2021, July. 2022 - Sept. 2022

- Develop deep learning models with PyTorch to perform semantic segmentation on abdomen CT images
- Cooperate with NVIDIA & National Health Insurance Administration to develop calcification assessment system
- Work with radiologists through Active Learning to efficiently label huge dataset and train computer vision models
- Design, train, and test deep learning models using PyTorch to help predict blood pressure of patients
- Study, implement, and modify time-series signals machine learning models such as LSTM and attention models

Learning and Intelligent Systems, CSAIL, MIT, *Researcher*

Sept. 2021 - Dec. 2021

- Research computer vision under Professor Tomás Lozano-Pérez and Professor Leslie Pack Kaelbling
- Develop algorithms in python to obtain semantic information from pointcloud data with PyBullet
- Study several research papers in the area of manipulating and transforming pointcloud data

Intelligent Robot and Automation Lab, National Taiwan University, *Researcher*

Aug. 2017 - Feb. 2019

- Develop independent research on autonomous robots under Professor Li-Chen Fu
- Use ROS to create a system that integrates exploration, SLAM (Simultaneous Localization and Mapping), and object recognition algorithms; received research awards in science fairs

Honors & Achievements

Taiwan Olympiad Scholarship

Sept, 2020 - Present

Second Place, Meichu Hackathon 2019, VIA

Oct. 2019

Gold medal, 50th International Physics Olympiad

July 2019

Third Place and Microsoft Special Award, Engineering, 58th Taiwan National Science Fair

July 2018