Wei-En (Warren) Wang

weinwang@mit.edu ● (857)285-8401
70 Pacific Street, Cambridge, MA, 02139

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: 5.0/5.0; Phi Beta Kappa, Sigma Pi Sigma inductee
Bachelor of Science in Electrical Engineering and Computer Science, Bachelor of Science in Physics
Past Coursework: Discrete Stochastic Processes, Design and Analysis of Algorithms, Machine Learning, Deep Learning Seminar, Natural Language Processing, Computer Vision, Feedback Systems, Signal&System&Inference, Machine Learning in Healthcare, Discrete Mathematics, Probability and Statistics, Linear Algebra, Embedded Systems, Quantum Mechanics, Physics Laboratory

Experiences

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 by extending SHAP; paper in submission
- Collaborate on building a PyPI library (https://github.com/sibyl-dev/pyreal) with Numpy, Pandas, Sci-kit Learn, and other ML, visualization python modules; paper in submission

National Taiwan University Hospital, *Researcher* **July. 2022 - Present**
- Develop deep learning models using PyTorch to perform semantic segmentation on abdomen CT images
- Cooperate with NVIDIA & National Health Insurance Administration to develop calcification assessment models
- Cooperate with radiologists through Active Learning to efficiently label huge dataset and develop ML models

Introduction to Machine Learning, MIT EECS, *Teaching Assistant* **Sep. 2022 - May. 2023**
- Help run an ML course during 2022 Fall by hosting office hours/lab sections and leading lab discussions
- Design and maintain homework google colab notebook files for the course

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

National Taiwan University Hospital, *Researcher* **July. 2021 - Sep. 2021**
- 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

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

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**