Don Ma
Innovative and Ambitious

CONTACTS

⌂ 1701 Hickory Ct, Ukiah, CA 95482   ✉ dyma2@wisc.edu   📱 415-988-5228   🌐 don.donyt.ma (profile website)

EDUCATION

University of Wisconsin - Madison - B.S in Computer Science 2021 - Current
- GPA: 3.71/4.0
- College of Letters Science Dean's List
- Member of the Artificial Intelligence Club

PUBLICATION

- *NurViD: A Large Expert-Level Video Database for Nursing Procedure Activity Understanding* - Accepted by NeurIPS 2023

EXPERIENCE

Quantitative Strategy Researcher at China Securities - Intern 6/2023 - 8/2023
- Design trading strategy with ML/AI models using Python.
- Evaluate performance and profiling analysis on the models.

Research Assistant at AIM Lab (Monash University) - RA 3/2023 - Current
- Assist research in the lab led by PhD Hu.
- Research projects focus on applications of computer vision in the medical field.

Project Intern at Google - Intern 8/2022 - 10/2022
- Responsible for Web development with typescript and angular programming languages.
- Completed performance and profiling analysis. Enhanced programming skills.

Project Intern at Amazon Web Services - Intern 6/2022 - 7/2022
- Study the essential AWS services and common solutions.
- Learn the fundamental AWS concepts related to computing, database, storage, networking, monitoring, and security.

ACADEMIC INVOLVEMENTS AND PROJECTS

MadParking App 10/2023 - 12/2023
- Course team project, self-designed and built an Android App. Our team built a parking app for the Madison area, with a specially designed recommendation algorithm that provides the user with the most suitable parking spot.
- Responsible for the main interface, recommendation system, and settings.

Sign Language Dataset & Translator 8/2023 - Current
- (new project) Build a dataset of American Sign Language and use ML/AI models to recognize and translate sign language into sentences.
- Plan to develop an app to help the disadvantaged group.

Research Report on LSTM Application in Futures Trading 6/2023 - 8/2023
- Build a LSTM model to fit the features of the Futures Market.
- Develop a strategy with the model.
- Complete and publish a report on the performance of the LSTM model application.

NeurIPS 2023 Datasets and Benchmarks-NurViD 3/2023 - 9/2023
- Assist in developing a large video dataset for deep learning training to understand nursing procedure activities.
- Reproduce three temporal action detection models on the dataset.
- https://github.com/minghu0830/NurViD-benchmark/

AI Stock Trading Program 6/2020 - Current
- Built an intraday short-term trading program using Python and the API of Alpaca. The program is running successfully on the paper trade, but still working on the improvements.
- The central idea of this program is to use a trained LSTM-DQN model to determine which trading strategy to use based on the current trend.

Paper on Minimax Tree and Alpha-Beta Pruning 7/2022 - 11/2022
- Publication focuses on the implementation of Minimax Tree and Alpha-Beta Pruning in AIs of different board games and the improvements of the algorithms.

Machine Learning Research, guided by Dr. Vipul 7/2022 - 8/2022
- Worked as a member of the online research seminar, guided by Dr. Vipul at CMU.
- Examined decision-making of AI based on probabilistic prediction. Employed Minimax – Tree, Alpha-Beta Pruning, and specifically designed heuristic algorithm.

SKILLS

- Machine Learning Models, NLP, CV, LLM, Fine-tuning, PyTorch, TensorFlow
- Python, Java, C, SQL, HTML, CSS, JS, Typescript, Angular, React, React Native
- Webpage Development, Android Development, Model Training