Che-Wei (Jerry) Lin

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EDUCATION

San Diego, CA **University of California, San Diego** **09/2017-06/2021**
Major: Data Science Overall GPA: 3.65 (Major GPA: 3.8)
Publication: Che-Wei Lin, Meng-Tse Wu and Keh-Yih Su, "Supporting Evidence Retrieval with Cross-Sentence Coupling," Proceedings of TAAI 2020, December 2020.

RESEARCH EXPERIENCE

Student Researcher **Halıcıoğlu Data Science Institute** **04/2021-08/2021**
- Implemented Explainable AI (XAI) method, such as Grad-CAM and IGOS_PP, to evaluate model that detects glaucoma from 7000+ fundus images.
- Devised an evaluating method that proves that IGOS_PP is better than Grad-CAM with a 20% lower false positive rate.

Student Researcher **UCSD Data Mining Lab** **10/2020-07/2021**
A National Science Foundation (NSF) Convergence Accelerator program.
- Scraped models and datasets from fields such as Computer Vision and NLP online to build a platform for researchers from diverse background to search for appropriate tools
- Developed a crawler tool using Beautiful Soup in Python to collect 6000+ AI datasets and models from more than 700 tasks available in Paper With Code and GitHub

EMPLOYMENT

Deep Learning Intern **Industrial Technology Research Institute** **Taipei, 10/2020-12/2020**
- Labeled the rise and fall in daily global stock index price using Python's Pandas package
- Researched multiple deep learning models and employed Resnet-50 with Keras to predict the stock trend, achieving a 65% of accuracy

Intern **Natural Language Understanding Lab, Academia Sinica** **Taipei, 06/2020-09/2020**
- Implemented BERT to retrieve supporting evidence that are essential to a question-answering system
- Conducted an error analysis and examine more than 200 cases to seek improvement for the model
- Proposed a novel model to incorporate cross-sentence coupling between adjacent sentences, which realized a 2.1% exact match improvement comparing with BERT baseline
- Published a conference paper at TAAI 2020 and nominated for Best Paper Award

Big Data Research Assistant **Taipei Medical University** **Taipei, 06/2019-09/2019**
- Cleaned and analyzed cancer patients data published by National Cancer Institute, using packages in Python, such as Pandas, Pyplot, Seaborn, and Matplotlib, to determine patient traits that might have caused cancer
- Generated a data-visualizing report using PowerBI software

COURSE PROJECTS

Face Mask Detector (2021). A CNN model used to classify whether a person in an image is wearing a mask correctly and GradCAM algorithm to visualize key segments of an image that helps the model to make prediction

Machine Learning Implementation (2019). An implementation of various machine learning methods, such as KNN, decision tree, and perceptron, from scratch

ACTIVITIES & TA EXPERIENCE

Instructional Assistant **UCSD Cognitive Science Development** **01/2021-03/2021**
- Hosted weekly office hours, helping students reviewing topics in probability and statistics

PR President **United Taiwanese Association, UCSD** **09/2019-05/2020**

TECHNOLOGIES

Programming Languages: Python, C, Stata, Java; Advanced in R, SQL, HTML, CSS, JavaScript
Software Libraries: Pytorch, TensorFlow, Keras