Yuxin (Christina) Ding

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EDUCATION

Fudan University, Shanghai **Sep 2018-Jul 2022**

Bachelor of Science, Major in Statistics & Minor in Data Science

Johns Hopkins University, Baltimore **Sep 2022-now**

Master of Science in Engineering, Major in Applied Mathematics and Statistics, Average GPA 4.0 so far

Course taken: Monte Carlo Methods, Optimization in Data Science, Computing for Applied Math, etc.

INTERNSHIP EXPERIENCE

VMware, Beijing **Jun 2021–Aug 2021**

- Established a dynamic graph with Python's package pyplot to visualize the algorithm results and added interactive functions, such as pause, progress bar, marking progress, etc. using tkinter.
- Compared how different clustering effectiveness evaluation indicators impact on the model, formed a report on choosing indicators
- Wrote comparing bin-packing algorithm to show improvement of current algorithm.

RESEARCH EXPERIENCE

Video based Speed Measurement **Oct 2022-now**

Project Supervisor: Prof. Qingfeng Li

- Perform video-based vehicle speed measurement using YOLOv5 as object detection algorithm and StrongSORT as object tracking method.
- Explore on 3-D transformation from real world scenario into pixel-wise video coordinates.
- Compare algorithms (i.e., Optical Flow Methods)
- Dig into relative lane detection algorithm and vehicle counting method.

Analysis of Vaccination on Markovian Random Walk Model of epidemic proliferation (Remote) **Jun 2021-Aug 2021**

Project Supervisor: Prof. Vadim Markel and Dr. Hui Xu

- Used Markovian random walk to simulate the spread of the epidemic under the SIR model
- Discussed the impact of epidemic prevention policies and vaccines on the spread of the epidemic
- Accepted by the 2021 International Conference on Statistics, Applied Mathematics and Computing Science (CSAMCS 2021); Author names: Yuxin Ding, Guanlin Guo, Feiqiong Xu;
- doi: 10.1117/12.2628029

A Speech-based Recognition Method for Automatic Depression Detection **Mar 2023-May 2023**

Group Project

- Based on audio and transcripts from participants' interviews, build classification models for depression detection and emotional analysis
- Explore resampling methods to enlarge and reinforce the dataset for better performance.

EXTRACURRICULAR ACTIVITIES

CFO, Fudan University TECC *(Technology & Education: Connecting Cultures)* **Sep 2018-Jul 2020**

- Planned and coordinated NLTP non-profit organization leadership training activities
- Assisted the 2018 autumn alumni association interview and organized the 2019 spring interview session
- Took charge of financial management issues of the association

International Communication Program Member, Juyang Club (Fudan) **Mar 2019-Jun 2019**

Key Member, Academic Literacy Developing Center of Renzhong Academy **Sep 2018-Jun 2019**

SKILLS

Computer Skills: Python, R, SQL, JAVA, etc.