Tingxi LI

(+86)15807660063 | tinzzy.li@gmail.com

EDUCATION

Dalian University of Technology   Sep 2019 - Jul 2024

Applied Chemistry Bachelor   Dalian, China

Technical University of Munich   Apr 2022 - Oct 2022

Computer Science (Exchange Student)   Munich, Germany

INTERNSHIP

Tenclass   Jan 2022 - Apr 2022

AI research intern   Shenzhen, China

- Responsible for building a virtual host for TikTok live streaming mostly based on an open resource project: wav2lip.
- Made modifications to the model and fine-tune it on a private dataset.

RESEARCH EXPERIENCE

Research on Adversarial Robustness of Robotic Arm   Dec 2022 - Present

Research Assistant at the Intelligent Robotics and Vision Lab (IRVL) of UT Dallas

- Design two adversarial attack approaches for an object grasping benchmark, respectively adding an opponent agent and feeding an attacked image as input.
- Implement a differentiable rendering method to replace the original renderer of BulletArm. Use the gradient from the differentiable renderer to produce adversarial inputs.

Research on credit card fraud detection   Aug 2021 - Sep 2021

Research Assistant at Carnegie Mellon University

- An analysis of popular financial fraud detection algorithms and put forward suggestions for improvement.
- Comparison of unsupervised outlier scores computed at different levels of granularity is performed and tested on a credit card fraud detection dataset. Use deep learning models such as STAN, DAE, and CNN. It is found that the current financial fraud detection models are dependent on the dataset, have high computational expenses, and are usually overfitted. The solution can be to improve the diversity of datasets and reduce the time and memory costs.
- The research result is published as *Deep Learning Techniques for Financial Fraud Detection*.

Mathematical modeling of the Asian-Pacific   Nov 2020

- First prize
- Responsible for collecting, organizing, and preliminary processing of data, conducting preliminary regression analysis in Python to screen the validity of data and eliminating abnormally skewed and missing data.
- Responsible for visualizing the data and presenting the model results visually in graphs and tables in the paper.
- Responsible for evaluating the reasonableness of the modeling results using SPSS by comparing the performance

MISCELLANEOUS

- **Languages:** English / Mandarin / Cantonese / German
- **Skills:** PyTorch / BulletArm / C++