ZHENXIANG LIN

github.com/blastxiaol zhenxianglin.github.me zhenxiang.lin@unswalumni.com
Shanghai, China (+86) 15000934443

EDUCATION

University of New South Wales Sydney, Australia
Master of Information Technology *September 2019 - December 2021*
Main Courses: *Computer Vision* (89/100), *Neural Networks and Deep Learning* (92/100)

Shanghai University of Electric Power Shanghai, China
Bachelor of Engineering in Electrical Engineering *September 2012 - June 2016*

RESEARCH EXPERIENCE

3D Visual Grounding on Large-Scale Pedestrian Scenes *December 2021 - present*
Research Intern, ShanghaiTech University *Advisor: Yuexin Ma*
- Performed cleaning and statistic of a new 3D Visual Grounding dataset.
- Implemented both single-stage and two-stage methods on our dataset to verify the validity of our dataset.
- Implemented current 3D Visual Grounding methods.
- Proposed a motion-aware view-based position embedding method and a two-stage framework for 3D Visual Grounding in the Wild achieving state-of-the-art.
- Submitted a paper on NeurIPS2022.

Multi-Label Long-Tailed Distribution Image Classification *June 2021 - December 2021*
Research Project, University of New South Wales *Advisor: Yang Song*
- Conducted a literature review about long-tail distribution and multi-label issue.
- Compared and analyzed effects of different factors on the long-tail distribution problem, including resampling, reweighting, and different backbones (Swin-Transformer and ResNet).
- Integrated the best methods to achieve a higher performance on VOC-MLT and COCO-MLT.
- Summarized advantages and disadvantages including all used methods.

Plants Image Instance Segmentation *October 2020 - December 2020*
Computer Vision Project, University of New South Wales
- Conducted a literature review about instance segmentation and plants image process.
- Implemented Unet by PyTorch and applied it on Plant Phenotyping dataset.
- Tuning the parameters to get a best result.

WORK EXPERIENCE

Research Intern, ShanghaiTech University, Yuexin Ma's Group *December 2021 - present*
- Conduct experiments, collate and clean the dataset, lead 3D Visual Grounding Project.

ACTIVITIES

Jane Street Market Prediction *Kaggle*
- Use TensorFlow2.0 to implement a MLP model to predict stock data in order to maximize profits. (Top 16%)

SKILLS

Language: Python, Java, C/C++
Libraries: Pytorch, TensorFlow2.0, OpenCV, scikit-learn, etc.
Framework: mmdetection, mmdetection3d, Django

AWARD

- The third prize of excellent student's scholarship at SUEP. (2012-2013 and 2013-2014 academic years)