



Ziyi Tang

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SUMMARY

- A Master Student in Artificial Intelligence at a Top100 University
- Research Capabilities, Research Intership, Remarkable Performance in Competitions, and Multiple Project Practices
- Good Communication/Teamwork Ability
- Strong Passion for AI, Active, Down-to-earth, and Innovative

EDUCATION

University of Southampton. Jul 2019 - Sep 2020
Artificial Intelligence Master School of Electronics and Computer Science
Southampton, UK

- GPA: 3.2/4.0
- Related courses: Deep learning / Computer Vision / Biometrics / Online and Reinforcement Learning

South China Agricultural University. Sep 2015 - Jun 2019
Automation Bachelor College of Engineering
Guangzhou, China

- GPA: 3.3/5.0
- Awards: Third Prize of Comprehensive Assessment in 2019, Outstanding Officer of Youth Volunteer Service Center (2015)
- Related courses: Artificial intelligence / Robotics / Human-Computer Interaction

INTERNSHIP

UBTech Nov 2020 - Aug 2021
Intern, Vision Group, Shenzhen Research Institution
Shenzhen

- Responsible for
 - Developing lightweight and robust detection models applicable to robots
 - Studying 3D detection/segmentation algorithms, visual data auto-labelling algorithms, model quantization, etc.

RESEARCH EXPERIENCE

Explainable Reinforcement Learning Based on Soft Decision Trees Apr 2020 - Sep 2020
Independent Research, Reinforcement Learning Group
Southampton, UK

- The graduation project of my master program supervised by Prof Tim Norman,
- Had Implemented a form of explainable Reinforcement Learning (RL) that provides an insight into the policy network of a RL model based on a surrogate soft decision tree model.
- Was appreciated by the supervisor and the second examiner Dr Christine Evers

Paper Reproduction: Conditioning by Adaptive Sampling for Robust Design

- Independent research
- Had reproduced the approach the paper proposed for robust design based on a protein fluorescence dataset to generate amino acid sequences with stronger fluorescence
 - Was responsible for data preprocessing, algorithm reproduction, etc.
 - Novel amino acid sequences were generated, with the best one nearly triples the maximal fluorescence in the given data
 - Close to the results of the paper

COMPETITION / PROJECT EXPERIENCE

Miscellaneous Jan 2019 - Mar 2020 Present

- Paper reproduction for a semantic segmentation model—DeepLab-v3, implemented on the CelebAMask-HQ dataset and a remote sensing image dataset.
- No. 5 in the Baidu Reinforcement Learning Camp FlappyBird Reproduction Contest
- Balloon segmentation based on Mask-RCNN
- Quadrotor suspension control based on DDPG algorithm, resulting the quadrotor to hover stably.
- Surface point cloud reconstruction based on binocular stereo vision

2020 Huawei DIGIX Global AI Challenge: Digital Device Image Retrieval Aug 2020 - Oct 2020
Team member
Shenzhen, China

- An image retrieval competition over the digital device image dataset in a real snap-to-shop scenario
- Was responsible for:
 - Metric-Learning-based feature extraction models' training
 - Postprocessing implementation, i.e. indexing, including dimensionality reduction, query enhancement, etc.
 - Solution recording and analysing
- Have achieved the 16th place (total 229, the top15 teams won the prizes)

Kaggle: Global Wheat Detection Jul 2019 - Aug 2020
Team Leader
Southampton, UK

- Object Detection competition over the dense, multi-species, multi-environment wheat dataset
- Was responsible for:
 - Model training, finetuning and hyper parameters setting
 - Trick Implementation such as DIoU, WBF and Ensemble
 - Scores and solutions' recording and analysing
- Had achieved gold medal in the public board (ranking 13 over 2270)

SKILLS & INTERESTS

- Python(proficient); C/C++(secondary certificate)
- Pytorch; PaddlePaddle; Keras; PARL
- IELTS 6.5; CET-6
- Git, Linux
- Also interested in GAN, GNN