LISHENG WU

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EDUCATION

University College London(UCL) *Sep 2017 - Nov 2018*
- MRes Web Science and Big Data Analytics - GPA: 74.7/100 (Distinction)

Shanghai Jiao Tong University(SJTU) *Sep 2013 - Jul 2017*
- B.S. in Computer Science(IEEE Honor Class) - GPA: 85.8/100 (3.55/4.0)

PUBLICATIONS

[1] Multi-View Reinforcement learning. ***L Wu****, M Li*(equal), J Wang, NeurIPS 2019* (accepted).

[2] Learning To Communicate Implicitly By Actions. *Z Tian, S Zou, T Warr,* ***L Wu****, J Wang, AAAI 2020.*

[3] Unsupervised Deep Domain Adaptation for Pedestrian Detection. *L Liu, W Lin,* ***L Wu****, Y Yu, M Y Yang, ECCV Workshop 2016* (accepted).

SKILLS

Tools	Caffe, MXNet, Tensorflow, PyTorch, ROS2, AWS
Language	Python, C++, CUDA, MATLAB, SQL

WORK EXPERIENCE

Wayve *Nov 2018 - Jan 2019, Jun 2019 - Now*
Research Engineer *Cambridge & London*

· Implemented vehicle logging module to subscribe messages from *ROS2* and write them to disk.
· Accelerated image processing from 12fps to over 110fps using *NvMedia API*, *CUDA* and *TensorRT*.
· Building the reinforcement learning(*RL*) infrastructure in the *RL* team for autonomous vehicles, including rewards, algorithms, visualisations, parallelized accessible replay memory and simulation env.

Nvidia APAC *Jul 2017 - Sep 2017*
Deeplearning Software Engineer Internship *Beijing*

· Created new StarCraft I scenarios on *gym-starcraft* and implemented multiagent RL algorithm *BiCNet*.

PROJECTS

Multi-View Reinforcement Learning *Jun 2018 - Sep 2018*

· Individually proposed to learn world models for multiple RL environments using shared dynamics, and implemented most of the model design and architecture.
· The trained models represent corresponding states in different environments with very similar feature representations, which can be used to train control model that adapts to all those environments easier.

Implicit Communications in Bridge Bidding *Apr 2018 - Sep 2018*

· Individually implemented the bidding environment using *Double Dummy Solver* to compute rewards.
· Helped with the design and implementation of belief module and communication rewards.

Pedestrian Detection and Tracking *Jan 2016 - Oct 2016*

· Individually implemented a real-time pedestrian detection system(36fps) based on *ReInspect* algorithm.
· Realized pedestrian tracking by matching features(30fps) and won first place in *MOT16(Now 3rd).*

Unsupervised Deep Domain Adaptation for Pedestrian Detection *Apr 2016 - Jul 2016*

· Apply MMD loss to the *element-wised product* of the activation and the weights connected to it instead of the *matrix product*. Utilized semi-supervised learning to perform domain adaption.

Curiosity-driven based exploration on Montezuma Revenge *Feb 2017 - May 2017*

· Implemented curiosity-driven based exploration methods on a most challenging atari game *Montezuma Revenge* and achieved 2500 scores on average. Ranked 2nd on *openai leadboard* in 2017.

MCTS Based Computer Go *Nov 2015 - Jan 2016*

· Implemented MCTS, AMAF, UCT algorithms and performed Monte-Carlo rollout with fixed patterns.

· Competed with students in groups with only 3s allowed for each step and won the 3rd out of 16 teams.