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] Learning Shared Dynamics with Meta-World Models. **Lisheng Wu**, *Minne Li, Jun Wang*, Arxiv.

[2] Learning multi-agent implicit communication through actions: a case study in Bridge, a collaborative imperfect information game. *Zheng Tian, Shihao Zou, Tim Warr,* **Lisheng Wu**, *Jun Wang*, Arxiv.

[3] Unsupervised Deep Domain Adaptation for Pedestrian Detection. *Lihang Liu, Weiyao Lin,* **Lisheng Wu**, *Yong Yu, Michael Ying Yang*, ECCV Workshop 2016 (accepted).

TECHNICAL SKILLS

Tools   Caffe, MXNet, Tensorflow, PyTorch, ROS2, AWS, Web, Hadoop
Languages   Python, C++, CUDA, MATLAB, SQL

WORK EXPERIENCE

Wayve   *Nov 2018 - Jan 2019*
Research Internship   *Cambridge*

· Implemented vehicle logging module to subscribe messages from *ROS2* and write them to disk.
· Accelerated the control model from 12Hz to over 110Hz with *NvMedia*, *CUDA* and *TensorRT*. Trained deep learning models with multi-camera inputs end to end.

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

· Implemented new *StarCraft I* micro-scenes on *gym-starcraft* and implemented the multiagent algorithm *BiCNet* to learn the cooperation among multiple agent on the micro-scenes.

PROJECTS

Unify Representations with Shared Dynamics   *Jun 2018 - Sep 2018*

· Proposed to learn world models for multiple *RL* environments using shared dynamics.
· The trained models represent corresponding states in different environments with similar representations. We associate the results with the self-consciousness phenomenon and human learning process.

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

· Implemented one bridge bidding environment whose rewards are computed by *Double Dummy Solver*.
· Designed belief module and communication rewards to help the bidding players communicate.

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

· Implemented curiosity-driven based exploration methods on one most challenging atari game *Montezuma Revenge* and achieve 2500 scores on average. Was ranked as the 2nd place on *openai leadboard*.

Pedestrian Detection and Tracking   *Jan 2016 - Oct 2016*

· Implemented one real-time pedestrian detection system(36fps) based on *ReInspect* architectures.
· Realized pedestrian tracking by matching features(30fps) and won first place in *MOT16*.

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

· Proposed a new derived *MMD* Loss and utilized semi-supervised learning to perform domain adaption.

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.