Lantao Yu

CONTACT INFORMATION

Carnegie Mellon University
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EDUCATION

Carnegie Mellon University, Pittsburgh, USA **Aug. 2017 - Present**

- Research Intern, Institute for Software Research, School of Computer Science, Advisor: Prof. FEI FANG

Shanghai Jiao Tong University, Shanghai, P.R. China **Sep. 2014 - Present**

- Senior, Department of Computer Science
- Research Assistant, Apex Data and Knowledge Management Lab, Department of Computer Science, Advisor: Prof. YONG YU and Prof. WEINAN ZHANG.
- GPA: 91.19/100

RESEARCH INTERESTS

The general areas of machine learning, including deep learning, reinforcement learning, multi-agent systems and their applications in sequential decision making, natural language processing and information retrieval.

PUBLICATION

- **Lantao Yu**, Weinan Zhang, Jun Wang, Yong Yu. SeqGAN: Sequence Generative Adversarial Nets with Policy Gradient. In *Proceedings of the 31st AAAI Conference on Artificial Intelligence*. **AAAI 2017**.
- Jun Wang, **Lantao Yu**, Weinan Zhang, Yu Gong, Yinghui Xu, Benyou Wang, Peng Zhang and Dell Zhang. IRGAN: A Minimax Game for Unifying Generative and Discriminative Information Retrieval Models. In *Proceedings of the 40th International ACM SIGIR Conference on Research and Development in Information Retrieval.* **SIGIR 2017**. **Best Paper Award Honorable Mention**
- **Lantao Yu***, Xuejian Wang*(equal contribution), Kan Ren, Guanyu Tao, Weinan Zhang, Yong Yu, Jun Wang. A Dynamic Attention Deep Model for Article Recommendation by Learning Human Editors' Demonstration. In *Proceedings of the 23rd SIGKDD Conference on Knowledge Discovery and Data Mining.* **KDD 2017**.
- **Lantao Yu***, Yaodong Yang*, Yiwei Bai*(equal contribution), Jun Wang, Weinan Zhang, Ying Wen, Yong Yu. An Empirical Study of AI Population Dynamics with Million-agent Reinforcement Learning. *arXiv 2017.*

HONORS AND AWARDS

- **Best Paper Award Honorable Mention of SIGIR 2017**. Paper: IRGAN: A Minimax Game for Unifying Generative and Discriminative Information Retrieval Models.
- **Scholarship of Excellent Undergraduates** (Top 2 students in school of Electronic Information and Electrical Engineering), Shanghai Jiao Tong University. 2016-2017
- **National Scholarship** (Top 3 students in Computer Science Department), Shanghai Jiao Tong University. 2015-2016.
- **Zhiyuan Honor Scholarship** (Top 5%, Twice), Shanghai Jiao Tong University. 2015 & 2016.

- **Yuan-Ze Scholarship** (Top 2% in Computer Science Department), Zhiyuan College, Shanghai Jiao Tong University. 2014-2015.

Research Experiences

ISR, School of Computer Science, Carnegie Mellon University

- Deep Reinforcement Learning in Multi-agent systems. Aug. 2017 - Present
- Machine Learning and Game Theory for Wildlife Security. Collaborating with WWF China. Aug. 2017 - Present

Dept of Computer Science, Shanghai Jiao Tong University

- Sequence Generative Adversarial Nets with Policy Gradient. Accepted at AAAI 2017. Jun. 2016 - Sep. 2016
- IRGAN: A Minimax Game for Unifying Generative and Discriminative Information Retrieval Models. Accepted at SIGIR 2017. Sep. 2016 - Jan. 2017
- Dynamic Attention Deep Model for Article Recommendation by Learning Human Editors Demonstration. Accepted at KDD 2017. Dec. 2016 - Feb. 2017
- An Empirical Study of AI Population Dynamics with Million-agent Reinforcement Learning. Under review at AAAI 2018. May. 2017 - Aug. 2017
- Reviewer of *PIC 2016* and *SIGIR 2017*
- Research on click fraud detection in computational advertisement. Collaborating with YOYI. 2015
- China Undergraduate Mathematical Contest in Modelling, First Prize in Shanghai Division. 2015
- Open Source Projects
  - Implementation of Sequence Generative Adversarial Nets with Policy Gradient. 700 stars in Github: `https://github.com/LantaoYu/SeqGAN`
  - Implementation of IRGAN. 200 starts in Github: `https://github.com/geek-ai/irgan`
  - A preliminary platform for million-agent reinforcement learning. Github: `https://github.com/geek-ai/1m-agents`
  - Multi-agent Reinforcement Learning paper collection Github: `https://github.com/LantaoYu/MARL-Papers`

Computer Skills

- Languages: Python, C/C++, LaTeX, Verilog.
- Machine Learning Packages: TensorFlow, Keras, Theano, Spark-MLlib, SKLearn, SciPy, NumPy, xGBoost, MXNet, Multiprocessing.
- Operating Systems: Unix/Linux, Windows.