

# KAIXIANG LIN

Github & Google Scholar & Homepage

Email: linkaixi@msu.edu

## EDUCATION

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**Michigan State University**

*Aug. 2015 - present*

Ph.D. student in Computer Science & Engineering

Advisor: Dr. Jiayu Zhou

**University of Science and Technology of China**

*Sept. 2010 - July 2014*

B.E. in Electronic Information Engineering

## RESEARCH INTERESTS

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**Reinforcement Learning, transfer learning, and data mining.**

My research focuses on developing efficient reinforcement learning algorithms for large-scale real-world applications, including transportation, multi-channel marketing, and healthcare.

## PROFESSIONAL EXPERIENCE

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Research Intern at **Didi AI Labs, Beijing**

*May. 2017 - Aug. 2017*

- Designed and implemented constrained multi-armed bandit algorithm for a multi-channel marketing project. Return on Investment (ROI) increased over 23% with the same scale of investment. This algorithm is currently running online. [**Press Coverage by Didi Chuxing**]

## SELECTED PUBLICATIONS

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**Kaixiang Lin**, Renyu Zhao, Zhe Xu, Jiayu Zhou. “Efficient Large-Scale Fleet Management via Multi-Agent Deep Reinforcement Learning”, the 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2018. [**Research track Oral**][**Acceptance rate: 10.9%**]

Fengyi Tang, **Kaixiang Lin**, Ikechukwu Uchendu, Hiroko H Dodge, Jiayu Zhou “Improving Mild Cognitive Impairment Prediction via Reinforcement Learning and Dialogue Simulation”, Preprint, 2018.

Liyang Xie, **Kaixiang Lin**, Shu Wang, Fei Wang, Jiayu Zhou “Differentially Private Generative Adversarial Network”, Preprint, 2018.

**Kaixiang Lin**, Shu Wang, Jiayu Zhou. “Collaborative Deep Reinforcement Learning”, Preprint, 2017.

Inci M. Baytas, **Kaixiang Lin**, Fei Wang, Anil K. Jain and Jiayu Zhou. “PhenoTree: Interactive Visual Analytics for Hierarchical Phenotyping from Large-Scale Electronic Health Records”, IEEE Transaction on Multimedia, 2016.

**Kaixiang Lin** and Jiayu Zhou. “Interactive Multi-Task Relationship Learning”, IEEE International Conference on Data Mining (ICDM), 2016.[**Oral**][**Acceptance rate: 8.5%**]

Inci M. Baytas, **Kaixiang Lin**, Fei Wang, Anil K. Jain and Jiayu Zhou. “Stochastic Convex Sparse Principal Component Analysis” EURASIP Journal on Bioinformatics and Systems Biology, 2016.

**Kaixiang Lin**, Jianpeng Xu, Inci M. Baytas, Shuiwang Ji and Jiayu Zhou. “Multi-Task Feature Interaction Learning”, the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2016. [**Research track**][**Acceptance rate: 18.1%**]

Jianpeng Xu, **Kaixiang Lin**, Pang-Ning Tan and Jiayu Zhou. “Synergies that Matter: Efficient Interaction Selection via Sparse Factorization Machine”, SIAM International Conference on Data Mining (SDM) 2016.

## HONORS AND AWARDS

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Conference Travel Grant: SDM2016, KDD2016, SDM2017, SDM2018, KDD2018  
Best Poster Award, Doctoral Forum, SDM2017

## SERVICES

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Program Committee (PC) member:

- 2018 IEEE International Conference on Big Data (IEEE BigData 2018)

Journal Reviewer:

- International Journal of Machine Learning and Cybernetics (JMLC)
- Neurocomputing
- Pattern Recognition
- Data Mining and Knowledge Discovery
- Transactions on Knowledge Discovery from Data (TKDD)

Conference external reviewer:

- The IEEE International Conference on Data Mining (ICDM), 2017, 2018.