

## Lei Le

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CONTACT INFORMATION	Cubicle 3061W, Luddy Hall 700 N Woodlawn Ave Bloomington, IN 47408	<a href="http://leile26.github.io">http://leile26.github.io</a> <a href="mailto:leile@iu.edu">leile@iu.edu</a>
RESEARCH INTERESTS	<b>Machine Learning</b> and <b>Artificial Intelligence</b> . <b>Representation Learning</b> , particularly tractable regularized dictionary learning; <b>Optimization</b> , particularly non-convex optimization over matrix factorization; <b>Reinforcement Learning</b> , particularly sparse coding for states and policy learning for continuous actions.	
EDUCATION	<b>Indiana University</b> , Bloomington, IN, United States  Ph.D, Computer Science, Aug 2013 to (Expected) May 2019 <ul style="list-style-type: none"><li>• Advisor: Martha White, Ph.D</li><li>• GPA: 3.98 / 4.0</li><li>• Ph.D minors: Statistical Sciences</li></ul> <b>Tongji University</b> , Shanghai, China  Master of Management Science, Information Management and Information System, Sep 2010 to Mar 2013 <ul style="list-style-type: none"><li>• GPA: 3.68 / 4.0</li></ul> <b>East China Normal University</b> , Shanghai, China  Bachelor of Management Science, Information Management and Information System, Sep 2006 to Jun 2010 <ul style="list-style-type: none"><li>• GPA: 3.75 / 4.0, rank: 1 / 48</li></ul>	
WORK EXPERIENCE	<b>Software Engineering Intern for PhD</b> <b>Google</b> , New York City Office Research and Machine Intelligence Group Mentor: Ariel Kleiner, Ph.D	Sep 2018 to Dec 2018
RESEARCH EXPERIENCE	<b>Research Assistant</b> Department of Computer Science, Indiana University Bloomington Supervisor: Martha White, Ph.D	Aug 2015 to Present
TEACHING EXPERIENCE	<b>Associate Instructor</b> CSCI-B554: Probabilistic Approaches to Artificial Intelligence at Indiana University Bloomington <b>Associate Instructor</b> CSCI-B561: Advanced Database Concepts at Indiana University Bloomington <b>Associate Instructor</b> CSCI-A110: Introduction to Computers and Computing	Spring 2015   Fall 2014  Spring 2014 & Fall 2013
MANUSCRIPTS	<ol style="list-style-type: none"><li>1. <b>Lei Le</b>, Ajin Joseph and Martha White. Global optimization geometry for induced matrix factorization.</li><li>2. <b>Lei Le</b> and Martha White. Identifying global optimality for dictionary learning.</li></ol>	

## PUBLICATIONS

1. Vincent Liu, Raksha Kumaraswam, **Lei Le**, and Martha White. The utility of sparse representations for control in reinforcement learning. (Accepted by AAAI 2019)
2. **Lei Le**, Andrew Patterson, and Martha White. Supervised autoencoders: Improving generalization performance with unsupervised regularizers. Advances in Neural Information Processing Systems (NeurIPS, the former NIPS), pages 107-117, 2018
3. **Lei Le**, Raksha Kumaraswamy, and Martha White. Learning sparse representations in reinforcement learning with sparse coding. In Proceedings of the Twenty-Sixth International Joint Conference on Artificial Intelligence, IJCAI-17, pages 2067–2073, 2017
4. **Lei Le**, Emilio Ferrara, and Alessandro Flammini. On predictability of rare events leveraging social media: A machine learning perspective. In Proceedings of the 3rd ACM Conference on Online Social Networks (COSN'15), Palo Alto, CA, USA, November 2015.

## PRESENTATIONS

1. Learning sparse representations for reinforcement learning. AI seminar at University of Alberta, March 29, 2018

## SERVICES

Reviewer for AAAI, ICML