LEI ZHENG

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EDUCATION

University of Illinois at Chicago	*July 2014 - Present*
PhD Candidate, Computer Science	Overall GPA: 3.66/4.0

Harbin Institute of Technology	*2010 - 2013*
M. Eng., Computer Science	Overall GPA: 3.11/4.0

Jilin University	*2006 - 2010*
B. S., Computer Science	Overall GPA: 3.50/4.0

PROFESSIONAL EXPERIENCES

Pinterest Research Lab Intern, Pinterest Inc.   May. 2018 - Aug. 2018
Mentors: Dan Xie, Jure Leskovec

• ***Project***: *User Profiling for Ads Ranking Models*
· Keywords: Ads Ranking, A/B Test
· Complexity and Technology: Python, JAVA, C++, GO, Hadoop, Cascading, Scala, A/B Test
· Details: We developed new ads ranking models and conducted A/B test on the platform of Pinterest. Five new models were shipped into production and lifted online performances from **0.3%** up to **4.29%** in terms of revenue, CTR and gCTR (varied for different models).

Research Assistant, UIC   Aug. 2014 - Present
Advisor: Philip S. Yu

• ***Project I***: *Deep Learning Based Recommender Systems*
· Keywords: Deep Learning, Recommender Systems, TensorFlow and Theano
· Complexity and Technology: 5K lines of Python code.
· Details: We utilize deep learning models, such as CNN or RNN, to build hybrid recommender systems. In experiments, our models achieve state-of-the-art performances in a variety of datasets.

• ***Project II***: *Deep Learning with Applications to Brain Disease Predictions.*
· Keywords: Deep Learning, Medical Data Mining
· Complexity and Technology: 1K lines of Python and Matlab code.
· Details: We develop state-of-the-art deep learning models for detecting human brain diseases, such as ADHD or Bipolar. Our models analyze keystroke dynamics data in order to infer a user's mood state using state-of-the-art RNN algorithms.
· Accomplishments: 1) Published two papers in KDD 2017 and SAC 2017; 2) **Winner of the Mood Challenge for ResearchKit**.

Research Assistant, Chinese Academy of Sciences   May 2013 - Feb. 2014
Advisor: Joshua Zhexue Huang

• ***Project I***: *Topic Modeling for Academic Papers*
· Keywords: Topic Modeling, Gibbs Sampling, Variational Inference
· Complexity and Technology: 1K lines of C++ code.
· Details: Modeling researchers' interests from academic papers by leveraging topic modeling techniques.

· Accomplishments: 1) Published a paper in AIRS 2013; 2) Designed the model and implemented the entire data pipeline for the project.

Natural Language Processing Engineer, Baidu Inc.   Jan. 2013 - May 2013

- **Project I**: *Machine Translation*
· Keywords: MapReduce, BigData
· Complexity and Technology: 2K lines of Python code in Hadoop.
· Details: In order to enhance the performance of machine translation engine, we developed a system based on hadoop to mine bilingual sentences from WikiPedia.
· Accomplishment: Implemented a hadoop system to extract bilingual sentences from 100TG data.

PUBLICATIONS

· Chaozhuo Li, Senzhang Wang, Philip S. Yu, **Lei Zheng**, Xiaoming Zhang, Zhoujun Li, Yanbo Liang. *Distribution Distance Minimization for Unsupervised User Identity Linkage*, In Proceedings of the 27th ACM International Conference on Information and Knowledge Management **(CIKM 2018)**.

· Fei Jiang, **Lei Zheng**, Fei Jiang, Jin Xu, and Philip S. Yu. *FI-GRL: Fast Inductive Graph Representation Learning via Projection-Cost Preservation*, In Proceedings of the the 2018 IEEE International Conference on Data Mining **(ICDM 2018)**.

· **Lei Zheng**, Chun-Ta Lu, Fei Jiang, Jiawei Zhang Philip S. Yu. *Spectral Collaborative Filtering*, In Proceedings of the 12th ACM Conference on Recommender Systems **(RecSys 2018)**.

· **Lei Zheng**, Bokai Cao, Vahid Noroozi, Philip S. Yu and Nianzu Ma. *Hierarchical collaborative embedding for context-aware recommendations*, In Proceedings of 2017 IEEE International Conference on Big Data **(BigData 2017)**.

· Bokai Cao, **Lei Zheng**, Chenwei Zhang, Philip S. Yu, Andrea Piscitello, John Zulueta, Olu Ajilore, Kelly Ryan, Alex Leow. *DeepMood: Modeling Mobile Phone Typing Dynamics for Mood Detection*, In Proceedings of the 23rd ACM SIGKDD Conference of Knowledge Discovery and Data Mining **(KDD 2017)**.

· Vahid Noroozi, **Lei Zheng**, Sara Bahaadini, Sihong Xie, Philip S. Yu. *SEVEN: Deep Semi-supervised Verification Networks*, In Proceedings of the 26th International Joint Conference on Artificial Intelligence **(IJCAI 2017)**.

· **Lei Zheng**, Vahid Noroozi, Philip S. Yu. *Joint deep modeling of users and items using reviews for recommendation*, In Proceedings of The Tenth ACM International Conference on Web Search and Data Mining **(WSDM 2017)**.

· **Lei Zheng**, Jingyuan Zhang, Bokai Cao, Philip S. Yu, Ann Ragin. *A novel ensemble approach on regionalized neural networks for brain disorder prediction*, In Proceedings of the 32nd ACM SIGAPP Symposium On Applied Computing **(SAC 2017)**.

· **Lei Zheng**, Kai Han. *Extracting Categorical Topics from Tweets Using Topic Model*, In Proceedings of the Ninth Asia Information Retrieval Societies Conference **(AIRS 2013)**.

TECHNICAL STRENGTHS

Computer Languages	C/C++, Java, MySQL, MATLAB, Python
Software & Tools	TensorFlow, Theano, Hadoop, LaTeX

PROFESSIONAL SERVICES

· Reviewer of ACM Transactions on Knowledge Discovery from Data (TKDD), 2015-Present

· External Reviewer of ICDM (2017), WSDM (2016), WWW (2016), AAAI (2016), CIKM (2016), ICDM (2015),

AWARDS AND HONORS

· UIC Peter and Deborah Wexler Graduate Student Scholarship (2014)

TEACHING

· CS 109 C++ and Matlab

· CS 401 Algorithm Design

· CS 411 Artificial Intelligence