Linlin Chen

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Education

2015–present **Illinois Institute of Technology**
Ph.D Candidate in Computer Science
GPA: 4.0/4.0
Adviser: Prof. Xiang-Yang Li & Prof. Peng-Jun Wan

2011–2015 **University of Science and Technology of China**
B.E. in Computer Science
Thesis: *Learning Entity and Relation Embedding for Knowledge Graph and Synonymous Relation Inferring*

Research Interests

Data Privacy & Security, Deep Learning, Machine Learning, Mobile Computing, Computer Vision

Professional Skills

- Programming: C/C++, Java, Python, SQL, R, Scala, MATALAB, Bash, Lua, HTML, JavaScript
- Deep Learning Framework: Tensorflow, PyTorch, Torch, Caffe, Keras
- Big Data Processing: Hadoop, Spark, HBase, AWS

Selected Projects

Crowded Deep Learning with Data Privacy **May. 2016–Jul. 2016**

- Design and implement a crowdlearning protocol for deep learning training over multiple mobile devices, with training data maintaining over data owners' mobile device.
- Implement and evaluate the prototype with Torch deep learning framework.
- Full responsibility.

Accountable Protocols for Big Data Trading **Feb. 2016–May. 2016**

- Design accountable protocols to trace data for big data trading to prevent dishonest consumers from re-selling.
- Responsible for the evaluation over tabular and text data to proves high traceability.

Big Data Trading Platform **Feb. 2015–Dec. 2015**

- Build big data trading platform with fine-grained access control.
- Responsible for Hadoop and Hbase configuration, SQL database access control and front-end development.

Graph-based Privacy Preserving Data Publishing **Mar. 2015–Jun. 2015**

- Propose a graph-based framework for privacy preserving data publishing.
- Responsible for algorithm design and evaluations over tabular and time-series data.

De-anonymizing Social Networks with Knowledge Graph **Jun. 2015–Jul. 2015**

- ➢ De-anonymize social network data to infer user identities and targeted users' private attributes.
- ➢ Responsible for inferring users' private attributes with random walk and knowledge graph.

Experience

Teaching Assistant, *Illinois Institute of Technology*

- ➢ CS535: Design & Analysis of Algorithms **Fall 2017**
- ➢ CS536: Science of Programming **Spring 2017**
- ➢ CS535: Design & Analysis of Algorithms **Fall 2016**

Research Assistant, *Illinois Institute of Technology* **Aug. 2015–present**

- ➢ Wireless Networking Lab
- ➢ Adviser: Prof. Xiang-Yang Li & Prof. Peng-Jun Wan
- ➢ Privacy preserving data publishing, privacy preserving mobile deep learning, image deep mining, data trading, etc.

Research Intern, *ICT, Chinese Academy of Sciences* **Mar. 2015–Jun. 2015**

- ➢ Research Center of Web Data Science & Engineering
- ➢ Assistant researches related to knowledge graph embedding and predication.
- ➢ Proposed a new entity and relation embedding method, and proved its efficiency in new entity and synonymous relation prediction.

Research Assistant, *University of Science and Technology of China* **Sept. 2013–Dec. 2014**

- ➢ Nature Inspired Computation and Applications Lab
- ➢ Fault diagnosis in the model space for automatic system.

Research Assistant, *University of Science and Technology of China* **Sept. 2012–Aug. 2013**

- ➢ Multi-Agent System Lab
- ➢ Implemented gesture recognition, fall detection and stranger recognition in the domestic robot.

Publications

1. *AccountTrade: Accountable Protocols for Big Data Trading Against Dishonest Consumers*, Taeho Jung, Xiang-Yang Li, Wenchao Huang, Jianwei Qian, **Linlin Chen**, Junze Han, Jiahui Hou, Cheng Su, IEEE INFOCOM, 2017
2. *Social Network De-Anonymization and Privacy Inference with Knowledge Graph Model*, Jianwei Qian, Xiang-Yang Li, Chunghong Zhang, **Linlin Chen**, Taeho Jung, Junze Han, IEEE Transactions on Dependable and Secure Computing (TDSC), 2017
3. *Graph-Based Privacy-Preserving Data Publication*, Xiang-Yang Li, Chunhong Zhang, Taeho Jung, Jianwei Qian, **Linlin Chen**, IEEE INFOCOM, 2016
4. *De-anonymizing social networks and inferring private attributes using knowledge graphs*, Jianwei Qian, Xiang-Yang Li, Chunhong Zhang, **Linlin Chen**, IEEE INFOCOM, 2016
5. *VoiceMask: Anonymize and Sanitize Voice Input on Mobile Devices*, Jianwei Qian, Haohua Du, Jiahui Hou, **Linlin Chen**, Taeho Jung, Xiang-Yang Li, Yu Wang, Yanbo Deng, arXiv 2017

Award

- Student Travel Grant, ACM MobiHoc **2015**
- Outstanding Student Scholarship (Grade 2) of USTC **Oct. 2014**
- Ministry of Education's Reward for the Undergraduate Projects of Innovation **May. 2014**
- Outstanding Volunteer Award **May. 2012**
- Outstanding Student Scholarship (Grade 2) of USTC **Oct. 2011**
- Outstanding Graduate Award (Grade 1) **Nov. 2011**

Professional Activities

Conference Reviewer of:

- CBD **2017**
- BigCom **2016 & 2017**
- IPCCC **2016**
- NIPS **2016**
- MSN **2016**