

# (Bill) Yuchen Lin *Ph.D. student in Computer Science*

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## Education

University of Southern California	LOS ANGELES, CALIFORNIA
<b>Ph.D. in Computer Science</b>	<i>Aug '18 – Present</i>
Advisor: Prof. <a href="#">Xiang Ren</a>	
Machine Learning, Natural Language Processing.	
Shanghai Jiao Tong University	SHANGHAI, CHINA
<b>B.Sc. in Computer Science</b>	<i>Spet '14 – Jun '18</i>
Advisor: Prof. <a href="#">Kenny Qili Zhu</a>	
Member of IEEE HONORED CLASS	
Thesis: <i>Common-Sense Knowledge Graph Construction and Representation</i> (Best Thesis Award, Top 1% at SJTU & Top 1 in the CSE Department.)	

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## Experience

Google AI	U.S.
<b>Research Intern</b>	<i>May '20 – Aug '20</i>
Manager: Dr. <a href="#">William W. Cohen</a>	
Differentiable Neural-Symbolic Reasoning with Commonsense Knowledge.	
Google AI	MOUNTAIN VIEW, CA, U.S.
<b>Research Intern</b>	<i>May '19 – Aug '19</i>
Manager: Dr. <a href="#">Sandeep Tata</a>	
Transferable Structured Data Extraction over Semi-Structured Documents.	
Microsoft Research, Asia	BEIJING, CHINA
<b>Research Intern</b>	<i>Oct '17 – Mar '18</i>
Manager: Dr. <a href="#">Jian-Guang Lou</a>	
Semantic Parsing and Question Answering for Tabular Data Analysis. The work is now part of Excel.	
StatNLP Group	SINGAPORE
<b>Visiting Fellow</b>	<i>Jun '17 – Sep '17</i>
Advisor: Prof. <a href="#">Wei Lu</a>	
Transfer Learning in NLP.	
ADAPT Lab	Shanghai, China
<b>Research Assistant</b>	<i>May '16 – June '18</i>
Advisor: Prof. <a href="#">Kenny Qili Zhu</a>	
Information Extraction, Text Mining, Traffic Prediction.	
IIoT Research Center	Shanghai, China
<b>Research Assistant</b>	<i>Feb '17 – Jun '17</i>
Advisor: Prof. <a href="#">Xinbing Wang</a>	
Temporal Network Analysis.	

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## Publications

### Peer-reviewed papers:

1. FreeDOM: A Transferable Neural Architecture for Structured Information Extraction on Web Documents.  
*in Proc. of KDD 2020 Research Track* (Acceptance Rate: 16.8%)  
**Bill Yuchen Lin**, Ying Sheng, Nguyen Vo, Sandeep Tata

2. TriggerNER: Learning with Entity Triggers as Explanation for Named Entity Recognition.  
*in Proc. of ACL 2020*  
**Bill Yuchen Lin\***, Dongho Lee\*, Ming Shen, Ryan Moreno, Xiao Huang, Prashant Shiralkar, Xiang Ren
3. LEAN-LIFE: A Label-Efficient Annotation Framework Towards Learning from Explanation.  
*in Proc. of ACL 2020*  
Dong-Ho Lee, Rahul Khanna, **Bill Yuchen Lin**, Jamin Chen, Seyeon Lee, Qinyuan Ye, Elizabeth Boschee, Leonardo Neves, Xiang Ren
4. Learning to Contextually Aggregate Multi-Source Supervision for Sequence Labeling.  
*in Proc. of ACL 2020*  
Ouyu Lan, Xiao Huang, **Bill Yuchen Lin**, He Jiang, Liyuan Liu, Xiang Ren
5. NERO: A Neural Rule Grounding Framework for Label-Efficient Relation Extraction.  
*in Proc. of TheWebConf (WWW) 2020* [Best Paper Runner-up (2/1500+)]  
Wenxuan Zhou, Hongtao Lin, **Bill Yuchen Lin**, Ziqi Wang, Junyi Du, Leonardo Neves, Xiang Ren
6. KagNet: Knowledge-Aware Graph Networks for Commonsense Reasoning.  
*in Proc. of EMNLP 2019*  
**Bill Yuchen Lin**, Xinyue Chen, Jamin Chen, Xiang Ren
7. AlpacaTag: An Active Learning-based Crowd Annotation Framework for Sequence Tagging.  
*in Proc. of ACL 2019 (Demo Track)*  
**Bill Yuchen Lin\***, Dongho Lee\*, Frank F. Xu, Ouyu Lan, Xiang Ren
8. Neural Adaptation Layers for Cross-domain Named Entity Recognition.  
*in Proc. of EMNLP 2018*  
**Bill Yuchen Lin**, Wei Lu
9. ExtRA: Extracting Prominent Review Aspects from Customer Feedback.  
*in Proc. of EMNLP 2018*  
Zhiyi Luo, Shanshan Huang, Frank F. Xu, **Bill Yuchen Lin**, Hanyuan Shi, Kenny Q. Zhu
10. Mining Cross-Cultural Differences and Similarities in Social Media.  
*in Proc. of ACL 2018*  
**Bill Yuchen Lin\***, Frank F. Xu\*, Kenny Q. Zhu, Seung-won Hwang
11. Automatic Extraction of Commonsense LocatedNear Knowledge.  
*in Proc. of ACL 2018*  
**Bill Yuchen Lin\***, Frank F. Xu\*, Kenny Q. Zhu
12. Multi-channel BiLSTM-CRF Model for Emerging Named Entity Recognition in Social Media.  
*in Proc. of EMNLP 2017 Workshop on Noisy User-generated Text (W-NUT)*  
**Bill Y. Lin\***, Frank F. Xu\*, Zhiyi Luo, Kenny Q. Zhu
13. Dynamic Detection of Communities and Their Evolutions in Temporal Social Networks.  
*in Proc. of AAAI 2018, Student Abstract*  
**Bill Y. Lin\***, Yaowei Huang\*, Jinghuan Shang\*, Luoyi Fu, Xinbing Wang
14. Transfer Learning for Traffic Speed Prediction: A Preliminary Study.  
*in Proc. of AAAI 2018, Workshop on Smart Internet of Things*  
**Bill Y. Lin\***, Frank F. Xu\*, Eve Q. Liao, Kenny Q. Zhu
15. Cross-region traffic prediction for China on OpenStreetMap.  
*in Proc. of ACM SIGSPATIAL 2016, International Workshop on Computational Transportation Science (IWCTS)*  
Frank F. Xu, **Bill Y. Lin**, Qi Lu, Yifei Huang, Kenny Q. Zhu

#### **Preprints (Technical Reports):**

- CommonGen: A Constrained Text Generation Challenge Towards Generative Commonsense Reasoning.  
*in Arxiv. May. 2020* [cs.CL] 1911.03705  
**Bill Yuchen Lin**, Wangchunshu Zhou, Ming Shen, Pei Zhou, Chandra Bhagavatula, Yejin Choi, Xiang Ren

- Birds have four legs?! NumerSense: Probing Numerical Commonsense Knowledge of Pre-trained Language Models.  
*in Arxiv. May. 2020* [cs.CL] 2005.00683  
**Bill Yuchen Lin**, Seyeon Lee, Rahul Khanna and Xiang Ren
  - IsoBN: Fine-Tuning BERT with Isotropic Batch Normalization.  
*in Arxiv. May. 2020* [cs.CL] 2005.02178  
Wenxuan Zhou, **Bill Yuchen Lin**, Xiang Ren
  - Scalable Multi-Hop Relational Reasoning for Knowledge-Aware Question Answering.  
*in Arxiv. May. 2020* [cs.CL] 2005.00646  
Yanlin Feng\*, Xinyue Chen\*, **Bill Yuchen Lin**, Peifeng Wang, Jun Yan, Xiang Ren
  - Can BERT Reason? Logically Equivalent Probes for Evaluating the Inference Capabilities of Language Models.  
*in Arxiv. May. 2020* [cs.CL] 2005.00782  
Pei Zhou, Rahul Khanna, **Bill Yuchen Lin**, Daniel Ho, Xiang Ren, Jay Pujara
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## Selected Honors and Awards

- Best Paper Runner Up, WWW 2020
  - Travel Support for ACL2018, ACL Walker Fund, 2018
  - Best Bachelor Thesis Award (Top 1% at SJTU & Top 1 in the CSE Department), 2018
  - Yuanqing Yang's Scholarship, the foundation of Class 1988 in CS Department at SJTU, 2018
  - Annenberg Fellowship Award, University of Southern California, 2018
  - Qide Scholarship, Shanghai Jiao Tong University, 2017-2018
  - Shanghai Scholarship, Shanghai Jiao Tong University, 2016-2017 (rank 2/69)
  - Academic Excellence Scholarship, Shanghai Jiao Tong University, 2016-2017 (rank 2/69)
  - Academic Progress Scholarship, Shanghai Jiao Tong University, 2016-2017 (rank 9/97)
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## Professional Services

Program Committee Member (Reviewer):

Main Conferences: EMNLP 2020, ACL 2020, AKBC 2020, IJCAI 2020, AAAI 2020, COLING 2020, AACL-IJCNLP 2020, CCL 2020 EMNLP 2019, IJCAI 2019, EMNLP 2018, NLPCC 2019

Workshops: ACL 2020 RepL4NLP, EMNLP 2019 DeepLo, ACL 2019 RepL4NLP, ACL 2019 SRW, ICLR 2019 LLD

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