

Dong-Ho Lee

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Education

University of Southern California (USC)

Ph.D. in Computer Science

- Advisor: [Dr. Jay Pujara](#)

Los Angeles, United States

Aug. 2021 - Current

University of Southern California (USC)

M.S. in Computer Science

- Advisor: [Dr. Xiang Ren](#)

Los Angeles, United States

Aug. 2018 - May. 2020

Sungkyunkwan University (SKKU)

B.S. in Computer Education

Seoul, Republic of Korea

Mar. 2012 - Feb. 2018

Sheffield University

Exchange program in Computer Science

Sheffield, United Kingdom

Sep. 2016 - Feb. 2017

Experience

Upstage AI

AI Research Engineer

Seoul, Republic of Korea

May. 2021 - Current

Information Sciences Institute, USC

Research Programmer I (Full time)

- Research Programmer supervised by [Dr. Ralph Weischedel](#)
- Working on MCS (DARPA) project. I am developing ways to mine the web for Commonsense knowledge that could be applied to diverse subject areas.
- Working on LESTAT (DARPA) project. To understand a complex event, we are organizing typical sequence of actions in format of schema. I am currently developing event order suggestion and event summarization modules in the team.

Los Angeles, United States

Sep. 2020 - Aug. 2021

Singapore University of Technology and Design (SUTD)

Visiting Researcher

- Project Leader of Academic assisted writing under [Dr. Roy Ka-Wei Lee](#)
- Aims to implement Academic Assisted Writing tool that provides real-time suggestions.
- Project goal is to provide appropriate real-time suggestions based on academic discipline—sociology, medicine, engineering, computer science, etc.

Singapore

May. 2020 - Aug. 2021

Information Sciences Institute / Department of Computer Science, USC

Student Research Worker

- Project Leader in [INK \(Intelligence and Knowledge Discovery Research\) lab](#) under [Dr. Xiang Ren](#)
- **[ICLR 2021]** Presented a concept-aware language model that can pack commonsense knowledge into the parameters of a text-to-text transformer.
- **[ACL 2019/2020]** Leveraged the performance of low-resource Information Extraction by finding meaningful supervision and unifying those multiple weak signals into various tasks such as Named Entity Recognition, Relation Extraction, and Sentiment Analysis.

Los Angeles, United States

Nov. 2018 - Aug. 2020

Publications

* These authors contributed equally

Preprints

[1] **AutoTriggeR: Named Entity Recognition with Auxiliary Trigger Extraction**

[Dong-Ho Lee](#)^{*}, Ravi K. Selvam^{*}, Sheikh M. Sarwar, Bill Y. Lin, Mahak Agarwal, Fred Morstatter, Jay Pujara, Elizabeth Boschee, James Allan and Xiang Ren

[\[WeaSUL@ICLR 2021\]](#) ICLR 2021 Workshop on Weakly Supervised Learning.

[\[TrustNLP@NAACL 2021\]](#) NAACL 2021 Workshop on Trustworthy Natural Language Processing. **(Best Paper Award)**

[2] **Good Examples Make A Faster Learner: Simple Demonstration-based Learning for Low-resource NER**

[Dong-Ho Lee](#), Mahak Agarwal, Akshen Kadakia, Jay Pujara and Xiang Ren

Papers in conference proceedings

[3] **Perhaps PTLMs should go to School – A Task to Assess Open Book and Closed Book QA**

Manuel Ciosici, Joe Cecil, Alex Hedges, [Dong-Ho Lee](#), Marjorie Freedman and Ralph Weischedel

[\[EMNLP 2021\]](#) Conference on Empirical Methods in Natural Language Processing (EMNLP), 2021.

[4] **Improving Text Auto-Completion with Next Phrase Prediction**

[Dong-Ho Lee](#), Zhiqiang Hu and Roy Ka-Wei Lee

[\[EMNLP 2021 \(Findings\)\]](#) Conference on Empirical Methods in Natural Language Processing (EMNLP), Findings, 2021.

[5] **ForecastQA: A Question Answering Challenge for Event Forecasting**

Woojeong Jin, Suji Kim, Rahul Khanna, [Dong-Ho Lee](#), Fred Morstatter, Aram Galstyan and Xiang Ren

[\[ACL 2021\]](#) Annual Meeting of the Association for Computational Linguistics (ACL), 2021.

[6] **RiddleSense: Answering Riddle Questions as Commonsense Reasoning**

Bill Yuchen Lin, Ziyi Wu, Yichi Yang, [Dong-Ho Lee](#) and Xiang Ren

[\[ACL 2021 \(Findings\)\]](#) Annual Meeting of the Association for Computational Linguistics (ACL), Findings, 2021.

[7] Pre-training Text-to-Text Transformers for Concept-centric Common Sense

Wangchunshu Zhou*, **Dong-Ho Lee***, Ravi Kiran Selvam, Seyeon Lee, Bill Yuchen Lin and Xiang Ren

[ICLR 2021] International Conference on Representation Learning (ICLR), 2021.

[SSL@NIPS 2020] NeurIPS 2020 Workshop on Self-Supervised Learning: Theory and Practice.

[8] Machine-Assisted Script Curation

Manuel R. Ciosici, Joseph Cummings, Mitchell DeHaven, Alex Hedges, Yash Kankanampati, **Dong-Ho Lee**, Ralph Weischedel and Marjorie Freedman

[NAACL-HLT 2021] The Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT), 2021.

[9] TriggerNER: Label-Efficient Learning for Named Entity Recognition via Annotating Entity Triggers

Bill Yuchen Lin*, **Dong-Ho Lee***, Ming Shen, Ryan Moreno, Xiao Huang, Prashant Shiralkar and Xiang Ren

[ACL 2020] Annual Meeting of the Association for Computational Linguistics (ACL), 2020.

[10] LEAN-LIFE: A Label-Efficient Annotation Framework Towards Learning from Annotator Explanation

Dong-Ho Lee*, Rahul Khanna*, Bill Yuchen Lin, Jamin Chen, Seyeon Lee, Qinyuan Ye, Elizabeth Boschee, Leonardo Neves and Xiang Ren

[ACL 2020] Annual Meeting of the Association for Computational Linguistics (ACL), 2020.

[11] AlpacaTag: An Active Learning-based Crowd Annotation Framework for Sequence Tagging

Bill Yuchen Lin*, **Dong-Ho Lee***, Frank F. Xu, Ouyu Lan and Xiang Ren

[ACL 2019] Annual Meeting of the Association for Computational Linguistics (ACL), 2019.

Research papers in Journals

[12] Fake news detection using deep learning

Dong-Ho Lee, Yu-Ri Kim, Hyeong-Jun Kim, Seung-Myun Park, Yu-Jun Yang

Journal of Information Processing Systems, vol.15, no.5, pp.1119-1130, 2019.

Services

Program Committee

SIAM International Conference on Data Mining (**SDM**): 2022

International Conference on Representation Learning (**ICLR**): 2022

Conference on Neural Information Processing Systems (**NeurIPS**): 2021

Conference on Empirical Methods in Natural Language Processing (**EMNLP**): 2021

Conference of the European Chapter of the Association for Computational Linguistics (**EACL**): 2021

External Reviewer

ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD**): 2020-2021

International World Wide Web Conference (**WWW**): 2020-2021

Annual Meeting of the Association for Computational Linguistics (**ACL**): 2020

The SIGNLL Conference on Computational Natural Language Learning (**CONLL**): 2019

Awards

2021 **Best Paper Award**, NAACL 2021 TrustNLP Workshop

2018 **Best paper award**, KIPS 2018 Spring Conference

2016 **Academic Scholarship**, SKKU (Sungkyunkwan University)

Extracurricular

Republic of Korea Air Force

Sergeant

- Led a team at the Master Control and Reporting Center (MCRC) at Osan Air Base
- Team managed radars and consoles that monitored possible activities from North Korean aircraft and ballistic missiles.

Osan AB, Republic of Korea

Aug. 2013 - Aug. 2015

Sangmoon High School

Computer Science Teacher

- Organized course curriculum and taught a computer science class for one semester.

Seoul, Republic of Korea

June. 2017 - Nov. 2017

Sunrin Internet High school

Teaching Intern

- Taught JAVA to students who showed promising talent in IT.
- Received K-12 teaching license.

Seoul, Republic of Korea

May. 2017

Software Skills

Programming Language Python, Java, Android, HTML, CSS, Javascript (Vue.js), React, PHP, C, C++ **Web framework** Django

Deep Learning Framework PyTorch, Tensorflow **Web scraping** Scrapy (w/ Selenium) **Database** MySQL, Postgres, Redis, Memcached