

Dong-Ho Lee

1478 W Jefferson Blvd, Los Angeles, CA 90007, USA

☎ (+1) 323-652-2434 | ✉ dongho.lee@usc.edu | 🏠 danny-lee.info | 📱 [danny911kr](https://danny911kr.github.io)

Education

University of Southern California

M.S. in Computer Science

- Advisor: Dr. Xiang Ren

Los Angeles, United States

Aug. 2018 - PRESENT

Sungkyunkwan University

B.S. in Computer Education

- Total GPA: 4.10/4.5 (Major GPA: 4.26/4.5)

Seoul, Republic of Korea

Mar. 2012 - Feb. 2018

Sheffield University

Exchange program in Computer Science

Sheffield, United Kingdom

Sep. 2016 - Feb. 2017

Experience

Information Sciences Institute / Department of Computer Science, USC

Research Student Worker

Los Angeles, United States

Nov. 2018 - May. 2020

- Project Leader in INK (Intelligence and Knowledge Discovery Research) lab
- 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.
 - [ACL 2019/2020] Implemented a web-based label efficient data annotation framework for sequence labeling and classification tasks which can dynamically suggest annotations with active learning and learning from natural language explanations for each labeling decision. We provide this framework to Snap for their labeling task. ([Project Website](#))
 - [ACL 2020] Introduced entity triggers, an effective proxy of human explanations for facilitating label-efficient learning of Named Entity Recognition models, and proposed trigger matching network, which jointly learns trigger representations and soft matching module with self-attention such that can generalize to unseen sentences easily for tagging. Our framework showed significant cost-effectiveness such that using 20% of the trigger-annotated sentences can result in a comparable performance of conventional supervised approaches using 70% training data.
 - Currently involved in IARPA project which aims to better extraction from text towards enhanced retrieval.

Republic of Korea Air Force

Sergeant

- Led a team to manage consoles for air traffic control for Korea's air defense.

Osan AB, Republic of Korea

Aug. 2013 - Aug. 2015

Publications

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

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

[ACL 2020] To appear in Proc of ACL 2020

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] To appear in Proc of ACL 2020

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

[Dong-Ho Lee*](#), Bill Yuchen Lin*, Frank F. Xu, Ouyu Lan and Xiang Ren

[ACL 2019] Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics, pp.58-63

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.

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

Awards & Services

2016 **Scholarship**, Academic Scholarship

SKKU (Sungkyunkwan University)

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

The federation of Korean Information Industries

External Reviewer WWW 2020, CONLL 2019, ACL 2020, EMNLP DeepLo 2019

Extracurricular

Sangmoon High School

After school teacher(Computer Science)

- Organized course curriculum and operated computer science class for high school students for a semester.

Seoul, Republic of Korea

June. 2017 - Nov. 2017

Sunrin Internet High school

Teaching Internship

- Teaching Internship for K-12 teaching license. Taught Java programming to high school students who attending IT-specialized school.

Seoul, Republic of Korea

May. 2017