Jinhyuk Lee

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EDUCATION

Korea University, Seoul　　　　　　　　　　　　　　　　　　　　　　　　Mar 2016 - Aug 2019
Ph.D. in Computer Science and Engineering (4.5/4.5)
Advisor: Prof. Jaewoo Kang

Korea University, Seoul　　　　　　　　　　　　　　　　　　　　　　　　Mar 2011 - Feb 2016
B.S. in Computer Science and Engineering (3.71/4.5)
Advisor: Prof. Jaehoon Lee

State University of New York Korea, Incheon　　　　　　　　　　　　　June 2013 - Aug 2013
Software Technology and Enterprise (Summer School)

PUBLICATIONS

Contextualized Sparse Representations for Real-Time Open-Domain Question Answering
Jinhyuk Lee, Minjoon Seo, Hannaneh Hajishirzi, Jaewoo Kang
ACL 2020 (short)

Biomedical Entity Representations with Synonym Marginalization
Mujeen Sung, Hwisang Jeon, **Jinhyuk Lee**, Jaewoo Kang
ACL 2020 (long)

Real-Time Open-Domain Question Answering on Wikipedia with Dense-Sparse Phrase Index
Minjoon Seo*, **Jinhyuk Lee***, Tom Kwiatkowski, Ankur Parikh, Ali Farhadi, Hannaneh Hajishirzi
ACL 2019 (long)

BioBERT: a Pre-trained Biomedical Language Representation Model for Biomedical Text Mining
Jinhyuk Lee*, Wonjin Yoon*, Sungdong Kim, Donghyeon Kim, Sunkyu Kim, Chan Ho So, Jaewoo Kang
Bioinformatics (2019)

ReSimNet : Drug Response Similarity Prediction based on Siamese Neural Network
Minji Jeon*, Donghyeon Park*, **Jinhyuk Lee**, Hwisang Jeon, Miyoung Ko, Sunkyu Kim, Yonghwa Choi, Aik-Choon Tan, Jaewoo Kang
Bioinformatics (2019)

CollaboNet : Collaboration of Deep Neural Networks for Biomedical Named Entity Recognition
Wonjin Yoon*, Chan Ho So*, **Jinhyuk Lee**, Jaewoo Kang
BMC Bioinformatics (2019)

A Neural Named Entity Recognition and Multi-Type Normalization Tool for Biomedical Text Mining
Donghyeon Kim, **Jinhyuk Lee**, Chan Ho So, Hwisang Jeon, Minbyul Jeong, Yonghwa Choi, Wonjin Yoon, Mujeen Sung, Jaewoo Kang
IEEE Access (2019)

Pre-trained Language Models for Biomedical Question Answering
Wonjin Yoon, **Jinhyuk Lee**, Donghyeon Kim, Minbyul Jeong, Jaewoo Kang
BioASQ Workshop at ECML PKDD 2019

Ranking Paragraphs for Improving Answer Recall in Open-Domain Question Answering
Jinhyuk Lee, Seongjun Yun, Hyunjae Kim, Miyoung Ko, Jaewoo Kang
EMNLP 2018 (short)

Learning User Preferences and Understanding Calendar Contexts for Event Scheduling
Donghyeon Kim*, **Jinhyuk Lee***, Donghee Choi, Jaehoon Choi, Jaewoo Kang
CIKM 2018 (full)

DeepNAP : Deep Neural Anomaly Pre-detection on a Semiconductor Fab
Chunggyeom Kim*, **Jinhyuk Lee***, Raehyun Kim, Youngbin Park, Jaewoo Kang
Information Sciences (2018)

Name Nationality Classification with Recurrent Neural Networks
Jinhyuk Lee, Hyunjae Kim, Miyoung Ko, Donghee Choi, Jaehoon Choi, Jaewoo Kang
IJCAI 2017 (full)

EXPERIENCE

Korea University — Sep 2019 - Present
Postdoctoral Researcher — Seoul, Korea

· Working on automatic knowledge base construction from question answering models
· Advising researches on question answering, neural machine translation, and biomedical text mining.
· Teaching Data Science lecture (CVH126) and fulfilling mandatory military service.

NAVER Clova — July - Sep 2019, Nov 2018 - Feb 2019
Research Intern (Mentor: Minjoon Seo) — Seongnam, Korea

· Worked on real-time open-domain question answering.
· Improved contextualized sparse representations for question answering.
· Worked on large pre-trained language models for the biomedical domain.

Konolabs, Inc. — Mar - Aug 2016
Research Intern (Mentor: Jaehoon Choi) — Seoul, Korea

· Developed a deep learning-based calendar scheduling system.

Tagme, Inc. — Aug 2014 - Feb 2016
Startup CEO — Seoul, Korea

· Provided cloud storage service with memorable file links.

Jiransoft, Inc. — June - July 2014
Software Engineer Intern — Seoul, Korea

· Developed an android mobile application.

HONORS & AWARDS

Winner of the Seventh BioASQ Challenge (Task 7b, Phase B) — Sep 2019
Provided a backbone model (BioBERT) and handled yes/no questions.

Winner of Multi-Targeting Drug DREAM Challenge — Nov 2018
Korea University Best Honors Scholarships — Mar 2014

The Grand Prize, Start-up Competition, Korea University — Jan 2014

Venture Internship Program Scholarships, Korea University — Dec 2013

Software Technology and Enterprise Program Scholarships, Korea University — Mar 2013 - Dec 2014

SERVICES

EMNLP 2020, **ACL 2020**, **AKBC 2020**, **2nd MRQA Workshop at EMNLP 2019**
Conference/Workshop Reviewer

PLOS ONE, **IEEE Access**, **IEEE TCBB**
Journal Reviewer

TEACHING

CVH126 Introduction to Data Science, Korea University   Fall 2019
Lecturer

COSE214 Algorithms, Korea University   Fall 2016
Teaching Assistant

REFERENCES

Jaewoo Kang
Professor, Department of Computer Science and Engineering, Korea University
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Jaegul Choo
Associate Professor, Graduate School of Artificial Intelligence, KAIST
jchoo@korea.ac.kr

Minjoon Seo
Ph. D. Candidate, Paul G. Allen School of Computer Science & Engineering, University of Washington
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