

Jay J. Lee

Research Associate
Department of Biomedical Informatics, Columbia University
New York, NY, 10032

EDUCATION *Master of Arts, Statistics* Sep, 2018 - Present
Columbia University, New York, NY
Concentration: Machine Learning

Bachelor of Science, Industrial Engineering Feb, 2012 - Feb, 2016
Bachelor of Economics, International Economics and Trade
Sungkyunkwan University, Seoul, South Korea

EXPERIENCE *Research Associate* Jan 2019 - Present
Columbia University, Department of Biomedical Informatics, New York

Researcher Oct 2018 - Jan 2019
Seoul National University, College of Medicine, Seoul, Korea

Army Officer Feb 2016 - June 2018
Republic of Korea Army, The 2nd Operational Command, Deagu, Korea

Research Assistant Jan 2015 - Dec 2015
Sungkyunkwan University, Department of Systems Mgmt Engineering, Suwon, Korea

RESEARCH INTERESTS **Deep Learning, Interpretable Representation Learning, Machine Learning, EHR Data Mining**

PUBLICATIONS **Journal Articles & Conference Proceedings**

1. C. Liu, C. Ta, J. Rogers, Z. Li, **J. Lee**, A. Butler, N. Shang, F. Kury, L. Wang, F. Shen, L. Ena, C. Friedman, H. Liu, C. Weng. Ensembles of Natural Language Processing Systems for Portable Phenotyping Solutions. *Journal of Biomedical Informatics* 100, 103318, 2019.

Posters & Presentations

1. **J. Lee**, C. Liu, N. Shang, X. Jiang, K. Chen, K. Kalluri, C. Pang, K. Natarajan, P. Ryan, C. Weng Generate the Concept Representation using OMOP Ontology Graph. 2019 OHDSI Symposium, arxiv: , 2019.

WORKING PAPERS

1. Enhancing Medical Concept Representation Using Deep Neural Networks
2. Synthetic Patient Generation using Improved Variational Autoencoder
3. Medical Document Recommender System Using Multimodal Representations

COMMUNITY SERVICE

Collaborator of Observational Health Data Sciences and Informatics (OHDSI)