Staff Associate

Department of Biomedical Informatics, Columbia University Irving Medical Center New York, NY, 10032

EDUCATION Master of Arts, Statistics

Sep, 2018 - Feb, 2020

Concentration: Statistical Machine Learning

Columbia University, New York, NY

Bachelor of Science, Industrial Engineering

Feb, 2012 - Feb, 2016

Bachelor of Economics, International Trade and Policy (double major)

Sungkyunkwan University, Seoul, Korea

EXPERIENCE Staff Associate

Feb 2020 - Present

Columbia University, Department of Biomedical Informatics, New York

Research Associate

Feb 2019 - Dec 2019

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, Machine Learning, Applied Statistics, Healthcare and Medicine

PUBLICATIONS Journal Articles & Conference Proceedings

- 1. **J. Lee***, C. Liu*, J. Kim, A. Butler, N. Shang, C. Pang, K. Natarajan, P. Ryan, C. Ta, C. Weng, Comparative Effectiveness of Knowledge Graph- and EHR Data-Based Medical Concept Embedding for Phenotyping. *Under review*.
- 2. J. Kim, C. Ta, C. Liu, A. Butler, L. Stewart, N. Shang, **J. Lee**, A. Ostropolets, K. Natarajan, P. Ryan, C. Sung, C. Weng, Towards Clinical Data-Driven Eligibility Criteria Optimization for Interventional COVID-19 Clinical Trials. *Preprint*.
- 3. J.R. Rogers, **J. Lee**, Z. Zhou, YK Cheung, G. Hripcsak, C. Weng, Contemporary Use of Real-World Data for Clinical Trial Conduct: A Scoping Review. *Under review*.
- 4. A. Butler, **J. Lee**, Y. So, L. Busacca, K. Marder, H.N. Ginsberg, D. Frederick, I. Castaneda, C. Weng, Impact of IMPACT: Longitudinal Analysis of an Integrated Patient Scheduling System in a Clinical Research Setting. *Accepted, AMIA Annual Symposium Proceedings*. 2020.
- 5. 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.

Workshop Papers & Posters

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, 2019.

COMMUNITY SERVICE

Collaborator of Observational Health Data Sciences and Informatics (OHDSI)

HONOURS & AWARDS

Commendation for Army Commitment, The 2nd Operational Command, 2018 Meritorious Unit Commendation, The 2nd Operational Command, 2017 Merit-based Scholarship, Sungkyunkwan University, 2015 Academic Scholarship, Sungkyunkwan University, 2013 Gifted Student at Incheon National University, 2004-2005 Young Gifted Student at Incheon City Office of Education, 2002-2004