JOOWON LEE

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EDUCATION

University of Wisconsin - Madison	**Doctoral student in Statistics**	*Aug. 2021 -*
University of California, Riverside	**Doctoral student in Applied Statistics**	*Sep. 2019 - Aug. 2021*
Seoul National University	**M.S. in Statistics (Advised by Taesung Park)**	*March. 2015 - Feb. 2017*
Seoul National University	**B.S. in Statistics and Nursing (Cum Laude)**	*Mar. 2008 - Feb. 2013*

WORK EXPERIENCE

University of Wisconsin - Madison	**Research Assistant (with Guanhua Chen)**	*Jan. 2022 -*
University of Wisconsin - Madison	**Graduate Teaching Assistant**	*Sep. 2021 -*
University of California, Riverside	**Graduate Teaching Assistant**	*Oct. 2020 - Jun. 2021*
GradQuant at UCR	**Statistical consultant and Workshop instructor**	*Oct. 2019 - Jun. 2020*
Hyundai Asan Medical Center	**E.R. Registered Nurse**	*July. 2013 - July. 2014*

RESEARCH INTEREST

Statistical Modeling, Matrix Factorization, Machine Learning, Clinical Data Analysis, Personalized Medicine

PUBLICATIONS

Journal Publications

[1] **J. Lee, S. Lee, J. Jang, and T. Park, "***Exact association test for small size sequencing data.***" BMC medical genomics, 11(2), 30. (2018) ([Jounal](#))**

[2] **J. Lee, H. Lyu, and W. Yao, "***Guaranteed constrained and augmented low-rank estimation for supervised dictionary learning.***" In preparation**

INVITED TALKS

(Scheduled) "Guaranteed constrained and augmented low-rank estimation for supervised dictionary learning", International Conference on Econometrics and Statistics, Ryukoku Univ. Japan, June 4-6, 2022

"Identification of genes related to pancreatic cancer through targeted sequencing data analysis", IEEE International Conference on Bioinformatics and Biomedicine, Dec 15, 2016

POSTERS PRESENTED

"Classification for Fake Job Postings", Department of Computer Science and Engineering, University of California, Riverside ([PDF](#))

"Identification of genes related to pancreatic cancer through targeted sequencing data analysis", Fall Conference of Korean Statistical Society, Nov 4, 2016

"Identification of genes related to pathology through targeted sequencing data analysis on Intraductal papillary mucinous neoplasm", The 25th Korea Genome Organization (KOGO) Annual Conference 2016, Sep 5-6, 2016

SOFTWARE DEVELOPMENT

"Textual Analysis by MCMC sampling" (Webpage): Given text data, the program computes profiles of correlated word usages. Such profiles are able to distinguish stylometric footprints of different authors.

TEACHING

(Current) Fall 2021: STAT 240 - Introduction to Data Modeling I, University of Wisconsin, Madison

Spring 2021: STAT 100 - Introduction to Statistics, University of California, Riverside

Winter 2021: STAT 048 - Statistics For Business, University of California, Riverside

Fall 2020: STAT 048 - Statistics For Business, University of California, Riverside

Fall 2016: Statistics Lab (R programming), Seoul National University

Spring 2016: Regression Analysis and Lab, Seoul National University

Fall 2015: Statistics, Seoul National University

STATISTICAL WORKSHOPS AS AN INSTRUCTOR

Spring 2020:

    ANOVA, University of California, Riverside

    Introduction to the Generalized Linear Model, University of California, Riverside

    All About Statistical Testing in R, University of California, Riverside

Winter 2020:

    Hypothesis Testing, University of California, Riverside

    ANOVA, University of California, Riverside

    Categorical Data Analysis, University of California, Riverside

Fall 2019: Data Manipulation in R, University of California, Riverside

Winter 2016 : Data Mining Techniques

    Penalized Regression, Bioinformatics and Biostatistics laboratory (BIBS), Seoul National University

    Decision Tree, Bioinformatics and Biostatistics laboratory (BIBS), Seoul National University

    Support Vector Machine, Bioinformatics and Biostatistics laboratory (BIBS), Seoul National University

PROGRAMMING SKILLS

R, Python, SAS, and SPSS

LICENSE

Registered Nurse License

Teacher's License for School Nurse

PROFESSIONAL ACTIVITIES

Statistical Analysis

[1] Participating project "Supervised dictionary learning", Jan. 2021 -

[2] *Research Assistant* in project "Identification of genes related to pancreatic cancer through targeted sequencing data analysis", Bioinformatics and Biostatistics Lab, Department of Statistics, Seoul National University, Jun. 2016 - Feb. 2017

[3] *Research Assistant* in project "Finding Diagnostic Criteria for Prediction of Malignancy for IPMN Patients using Seoul National University Hospital Data and Korea-Japan hospital Data", Bioinformatics and Biostatistics Lab, Department of Statistics, Seoul National University, Jan. 2016 - Jul. 2016

[4] *Research Assistant* in project "Microarray Data Normalization and Analysis for Pancreatic Cancer Patients at Seoul National University Hospital", Bioinformatics and Biostatistics Lab, Department of Statistics, Seoul National University, Aug. 2015 - Nov. 2015

[5] *Junior researcher* in project "Investigation of ER Nurses of Pain Management for Trauma Patients", Emergency Room Research Team, Asan Medical Center, Aug. 2013

[6] *Junior researcher* in project"Identification of Fall Risk factors and Development of Fall Risk Assessment Tool for Emergency Room", Emergency Room Research Team, Asan Medical Center, Apr. 2014

[7] *Undergraduate Student Intern* in project "Clustering Analysis of Treatment Response for Bipolar Disease Patients", Bioinformatics and Biostatistics Lab, Undergraduate Student Intern, Department of Statistics, Seoul National University, Jan. 2012 - Feb. 2012

Statistical Consultation

[8] Consultation including Experimental Design and Statistical Inference, Statistical Research Institute, Sep - Dec, 2015

[9] Consulting statistical theories and practices and conducting workshops for graduate students, University of California, Riverside, Oct. 2019 - Jun. 2020

Works related to Public Health

[10] Designing Practice Test for Korean Nurse Licensing Exam, Pacific Books, June - Oct, 2017

[11] Publishing Health/Medical Information to Public, SNU HQ Center, Seoul National University College of Medicine, Nov. 2014 - Feb. 2015

[12] Developing Strategies for the Official Website of National Health Insurance Service, Consumer Health Informatics & Communication, Researcher, Seoul National University College of Nursing, Sep. 2014 - Dec. 2014

[13] Developing Application for Patients with Cleft Lib & Cleft Palete in South National University Hospital, Consumer Health Informatics & Communication, Researcher, Seoul National University College of Nursing, Sep. 2014 - Dec. 2014

[14] Writing the First Korean Manual of *"Fitbit"* for Seoul National University Hospital Patients and Other Research Assistant's Works (Literature Review, Basic Statistics, Office Work), Consumer Health Informatics & Communication, Seoul National University College of Nursing, Jan. 2011 - Sep. 2011

Translations

[15] iOS application: "Patient Safety", Hyundai Asan Medical Center, June, 2013

[16] Book: *"Personal health records: A guide for clinicians"*, Research Assistant, Consumer Health Informatics & Communication, Seoul National University College of Nursing, Jan. 2011 - Sep. 2011