Jihui **Lee**

github.com/jihuilee gijhuilee.com in linkedin.com/in/jihuilee

□ +1 917 929 1479 **>** jihui.lee@columbia.edu

₹ 722 West 168th Street, 6th Floor, New York, NY 10032

Education

Columbia University, New York, NY

2018

PhD in Biostatistics

- > Advisors: Dr. Jeff Goldsmith and Dr. Gen Li
- > Dissertation : Varying-Coefficient Models and Functional Data Analyses for Dynamic Networks and Wearable Device Data

Seoul National University, Seoul, Korea

2013

MS in Statistics

2011

University of Seoul, Seoul, Korea

BS in Statistics (Highest Honors); BA in Urban Administration

Research Interests

- > Functional Data Analysis
- > Statistical Analysis of Complex Networks
- > Data Mining and Machine Learning

Academic Honors

2018	Presidential Teaching Award for Graduate Student Instructors, Columbia University, NY		
2018	Travel Fellowship Award (NSF), Political Networks Workshops and Conference, Arlington, VA		
2017-2018	Huo Family Foundation Scholarship, Columbia University, New York, NY		
2017	Travel Fellowship Award (NSF), Political Networks Workshops and Conference, Columbus, OH		
2017	Distinguished Student Paper Award, Eastern North American Region (ENAR), Washington, DC		
2016	First Runner-Up, Columbia Data Science Institute Poster Social and Competition, New York, NY		
2013-2016	Biostatistics Fellowship, Columbia University, New York, NY		
2012	Brain Korea 21 Scholarship, Seoul National University, Seoul, Korea		
2009	Seoul Mayor's Fellowship, University of Seoul, Seoul, Korea		
2007-2010	Academic Excellence Scholarship, University of Seoul, Seoul, Korea		

Research Experience

06/2017

International Center for AIDS Care and Treatment Program (ICAP)

New York, NY

- 07/2018 Research Assistant

> Conduct statistical analysis and produce tables for Population-based HIV Impact Assessment (PHIA) project

SAS | Survey Method |

12/2014

Simons Foundation Autism Research Initiative (SFARI)

New York, NY

- 11/2015 | Research Assistant

- > Conduct latent class analysis (LCA) to identify the patterns of abnormality in cognitive, behavioral, neurological, and anthropometric phenotypes among 16p11.2 deletion/duplication children
- > Simons Variation in Individuals Project (SVIP) quantitative analysis using linear mixed models _____
 - SAS R Missing Data LCA Mixed effects model

09/2012 International Vaccine Institute (IVI) Seoul, Korea - 05/2013 Research Assistant > Statistical analysis) Case fatality rate and length of hospital stay among patients with typhoid intestinal perforation in developing countries: A systematic literature review, 2014 > Data management and literature review regarding typhoid vaccine R SAS Stata Simulation Efficacy Cost-Effectiveness Analysis 09/2010 Office of Admissions, University of Seoul Seoul, Korea - 02/2011 Data Analyst > Statistical analysis for publishing annual report R SAS SPSS

Publications

Published

> Julia P. Owen, Polina Bukshpun, Nicholas Pojman, Tony Thieu, Qixuan Chen, **Jihui Lee**, Debra D'Angelo, Orit A. Glenn, Jill V. Hunter, Jeffrey I. Berman, Timothy P. Roberts, Randy Buckner, Srikantan S. Nagarajan, Pratik Mukherjee, and Elliott H. Sherr. "Brain MR Imaging Findings and Associated Outcomes in Carriers of the Reciprocal Copy Number Variation at 16p11. 2." Radiology (2017): 162934.

Submitted

- > **Jihui Lee**, Gen Li, and James D. Wilson. **"Varying-Coefficient Models for Dynamic Networks."** (Submitted) Computational Statistics & Data Analysis. Preprint available at arXiv:1702.03632 (2017). *A version of this manuscript won an ENAR 2017 Student Paper Award.
- > **Jihui Lee**, Gen Li, William F. Christensen, Gavin Collins, Matthew Seeley, Anton Bowden, David Fullwood, and Jeff Goldsmith. **"Functional Data Analyses of Gait Data Measured Using In-Shoe Sensors."** (Under Revision) Statistics in Biosciences. Preprint available upon request (2017).

In Preparation

- > Yoonjung Lee, Jesse Hammond, and Jihui Lee. "Detecting Changes in Congressional Twitter Networks."
- > Anthony Diaz, **Jihui Lee**, Jaspreet Kaur, Arman Mushtaq, and Margaret Omatsone. **"Effect of Co-Administration of Long-Acting Insulin in Acute Management of Diabetic Ketoacidosis."**
- > Jihui Lee, Qixuan Chen, LeeAnne G. Snyder, Roger Vaughan, Raphael Bernier, Kyle J. Steinman, Ellen Hanson, Robin P. Goin-Kochel, Arianne S. Wallace, Jennifer Gerdts, Stephen Kanne, Leandra Berry, Anne Snow, Elliot Sherr, Christa L. Martin, David H. Ledbetter, John E. Spiro, and Wendy K. Chung. "Examining Patterns of Abnormality in Multiple Phenotype Traits among 16p11.2 Deletion/ Duplication Children."
- > Jihui Lee, Jeff Goldsmith, and Gen Li. "Functional Data Approaches for Continuous-Time Event-Based Dynamic Networks."
- > Jihui Lee, Gen Li, and Jeff Goldsmith. "Functional Registration of Three-Dimensional Graphs."

Teaching Experience

Instructor: Full responsibility of curriculum, lectures, homework and exams

Columbia University

New York, NY

> Statistical Computing with SAS (P6110 : Master Level)

Spring 2016 - 2018; Fall 2016 - 2017; Summer 2018

> Introduction to Biostatistics (P6103 : Master Level)

Summer 2014 - 2018

- Biostatistics Enrichment Summer Training Diversity Program (BEST)
- Columbia Summer Institute for Training in Biostatistics (CSIBS)

Teaching Assistant: Holding regular office hours & tutorials and grading assignments

Columbia University	New York, N
 Theory of Statistical Inference 2 (P9110 : Ph.D. Level) Theory of Statistical Inference 1 (P9109 : Ph.D. Level) Linear Regression Models (P8111 : Master Level) Introduction to Biostatistical Methods (P6104 : Master Level) 	Spring 2016 - 2017 Fall 2014 - 2016 Spring 2015 Summer 2014, 2017 Seoul, Korea Spring & Fall 2012
Seoul National University	
> Statistical Seminar (Undergraduate Level)	
University of Seoul	Seoul, Korea
> Mathematical Statistics (Undergraduate Tutor)	Fall 201
Talks	
06/08/2017 Political Networks (PolNet) Workshops and Conference Detecting Changes in Congressional Twitter Networks The 11th Annual Political Networks Workshops and Conference	Arlington, VA
04/02/2018 Columbia University Functional Data Approaches to Temporally Heterogeneous Data Doctoral Research Symposium	New York, NY
03/25/2018 Eastern North American Region (ENAR) Functional Data Analyses of Gait Data ENAR 2018: Poster presentation	Atlanta, GA
03/21/2018 Columbia University Functional Data Analyses of Gait Data Graduate Student Research Seminars (GSRS)	New York, NY
02/06/2018 Columbia University Functional Data Analyses of Gait Data Functional Data Analysis Working Group (FDAWG)	New York, NY
07/31/2017 Joint Statistical Meetings (JSM) Varying-coefficient models for dynamic networks JSM 2017: Speed oral and poster presentations	Baltimore, MD
07/28/2017 North American Social Networks (NASN) Conference Varying-coefficient models for dynamic networks The 1st NASN of the International Networks for Social Network Analysis (INSNA)	Washington, DC
06/16/2017 Political Networks (PolNet) Workshops and Conference Varying-coefficient models for dynamic networks The 10th Annual Political Networks Workshops and Conference	Columbus, OH
04/05/2017 Data Science Institute (DSI), Columbia University Varying-coefficient models for dynamic networks Data Science Day: Poster presentation	New York, NY
03/14/2017 Eastern North American Region (ENAR) Varying-coefficient models for dynamic networks ENAR 2017: Contributed papers	Washington, DC

ENAR 2017 : Contributed papers

02/23/2017 Columbia University

New York, NY

The beauty of ggplot2
Columbia Biostatistics Computing Club (CBCC)

10/13/2016 Columbia University

New York, NY

Incorporating the Function-on-Scalar Regression with Curve Registration via Variational Bayes Graduate Student Research Seminars (GSRS)

10/11/2016 Columbia University

New York, NY

A Family of Functional Exponential Random Graph Models for Dynamic Networks with Temporal Heterogeneity

Functional Data Analysis Working Group (FDAWG)

09/29/2016 Data Science Institute (DSI), Columbia University

New York, NY

Functional Exponential Random Graph Models for Time-Varying Networks DSI Poster Social and Competition (First runner-up)

03/29/2016 Columbia University

New York, NY

Functional Exponential Random Graph Models for Smoothly Transitioning Networks Functional Data Analysis Working Group (FDAWG)

03/24/2016 Columbia University

New York, NY

Functional Exponential Random Graph Models for Smoothly Transitioning Networks Graduate Student Research Seminars (GSRS)

03/03/2015 Columbia University

New York, NY

Weighted and Generalized Least Squares P8111 Linear Regression Models (Guest Lecturer)

02/24/2015 Columbia University

New York, NY

Data Visualization with ggplot2
Functional Data Analysis Working Group (FDAWG)

Skills

Membership

- > R, SAS, SPSS, C++, Python
- > MFX, Microsoft Office
- > English, Korean

- > American Statistical Association (ASA)
- > Eastern North American Region (ENAR)
- > Korean Statistical Society (KSS)
- > International Chinese Statistical Association (ICSA)

Software Development

R Package 'VCERGM'

- > Implement varying-coefficient random graph models (VCERGMs) on dynamic networks
- > R package is available at https://github.com/jihuilee/VCERGM.

Academic Activities

Functional Data Analysis Working Group (FDAWG)

New York, NY 2013 - 2018

Department of Biostatistics, Columbia University Active Member

Graduate Student Research Seminar

New York, NY

Department of Biostatistics, Columbia University

2016 - 2017

Group Organizer

Stony Brook University Exchange Program in Applied Mathematics and Statistics (AMS)	Stony Brook, NY Spring 2010
Service	
Healthcare Data Analytics Career Panel , Columbia University Career Panel	New York, NY 04/25/2018
ENAR 2018 Spring Meeting Session Chair: Electronic Health Records	Atlanta, GA 03/28/2018
ENAR 2017 Spring Meeting Poster Judging Coordination	Washington, DC 03/12/2017
Doctoral Program Subcommittee on Biostatistics (DPSOB) , Columbia University Student Representative	New York, NY 2016 - 2018
Biostatistics Student Cohort (BSC) , Columbia University Ph.D. Representative	New York, NY 2014 - 2018
KSS Spring Conference of Probability and Statistics Conference Coordination: Hosting international participants as a translator	Seoul, Korea 07/01/2017 - 07/02/2017
Uijeongbu Girls' High School Mathematics Tutor	Uijeongbu, Gyeonggi, Korea Summer & Winter 2008
Department of Statistics , University of Seoul Departmental Student Representative	Seoul, Korea 2007 - 2009