JIEUN LEE

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https://www.linkedin.com/in/jieun-lee-07601b119/

- ♦ Postdoctoral fellow currently working at the National University of Singapore, being responsible for conducting a research, "Pandemic and Cities: Smart Management, Resilience and Adaptation in Seoul and Singapore".
- → Graduated Yonsei University (GPA: 4.16/4.30) in 2019 with 6 years of experience in conducting research projects and teaching, especially regarding the smart cities and data analysis. Published one article in a peer-reviewed journal and awarded four session best papers in conferences.
- ♦ Certified regarding the data analysis skills, urban planning, and transportation knowledge and practical skills.
- → Have tutored Econometrics, Statistics, quantitative models, and related software to the public for 6 years.
- ♦ Conducted 15 urban planning and engineering related projects.
- ♦ Worked as a chief student of department of Urban planning and engineering for four semesters in a row.
- → Have been financially supported by Korea Ministry of Land, Infrastructure and Transport(MOLIT) as 'Innovative Talent Education Program for Smart City' (2014.8.8-2019.2.28).

EXPERIENCE

2021.11 - NOW

POSTDOCTORAL FELLOW, THE NATIONAL UNIV. OF SINGAPORE

• currently participating in "Pandemic and Cities: Smart Management, Resilience and Adaptation in Seoul and Singapore". These include big-data analysis and visualization, writing papers regarding the project.

2019.11 - 2021.10

ASSOCIATE RESEARCH FELLOW, SEOUL INSTITUTE

- participated in establishing *Re-zoning Plan of Seoul Metropolitan city*, considering the future demand, foreign countries' land use and zoning trends, current issues, and each neighborhood's natural, physical, and locational characteristics. These include data analysis and visualization, case studies of foreign cities' zoning resolutions.
- Until May 2020, I participated in establishing *Balanced Regional Development Plan*, which aims to relieve the regional gap and develop Seoul Metropolitan city to become a more equitable city at the regional levels. This includes data analysis based on subregions with 50 indices in five fields (residential environment, transportation, education, community facilities, industry) to evaluate inequality between sub-regions, and intrigue alternative policies to shortening the gap.
- Project List
- 2) Restructuring Zoning System of Seoul (2020.6 2021.12), Seoul Metropolitan Government
- 1) Balanced Regional Development Plan (2019.11 2020.5), Seoul Metropolitan Government

2014.9 - 2019.8

PROJECT RESEARCH ASSISTANT, YONSEI UNIVERSITY

- Conducted numerous data analysis with real estate, population, and household data to intrigue the implications for the projects or estimate the demand amount of each land use
- Managed all process of feasibility analysis projects, which include collecting data, estimating the cost and revenue, examining the project's cash flow, and obtaining its B/C or PI index to determine its result based on aggregated data.
- Collaborated on current projects with senior leaders across the government departments (Ministry of National Defense, LH company under the Ministry of Land, Infrastructure, and Transport)
- Conducted demand estimation of residence, commerce, and industrial facilities for each project site
- Communicated, presented research results in front of the public commission organization.
- Wrote research reports and submitted to the public commission organization
- ◆ Project List
- 13) Smart Cities Development Strategy (2017.9.15-2018.1.31). National Assembly Secretariat.
- 12) Future High-tech Industrial Complex's Development Planning Project (2017.8.23-2018.7.20). HDC Hyundai Development Company.
- 11) Yongin City Urban High-tech Industrial Complex "Medi-City" Development Concept Research (2018.1.-2018.3.). Educational Foundation Yonsei University.
- 10) Profit Maximization Strategy Establishment Research of Yongln City Urban High-tech Industrial Complex (2017.1.-2017.7.) Educational Foundation Yonsei University.
- 9) Busan Metropolitan City Yeongdo-gu Project Site Plan's Feasibility Analysis (2017.8.-2017.11.), Educational Foundation Yonsei University.
- 8) Feasibility Analysis and Demand Estimation of Cheongju Industrial Complex Rental Housing Project Plan (2017.1.-2017.4.), Korea Research Institute for Local Administration.
- 7) Goyang City Master Plan and Feasibility Review Project (2016.4.-2016.10.), Korea Land and Housing Corporation (LH)
- 6) Dongjak Gu, City Development Plan Establishment Project (2016.4-2017.12.), Dongjak-gu.
- 5) Research of Evaluation Methods and Criteria for Feasibility Analysis (2015.8.-2016.7.), Korea Land and Housing Corporation (LH)
- 4) Daegu Metropolitan City K-2 Military Airport Relocation Planning Research (2015.5.-2016.10.), Daegu Metropolitan City Hall
- 3) Research of Student Apartment and Mixed-Use Trends (2015.4.-2016.6.)
- 2) Location Feasibility Analysis of Pocheon Zoo (2014.11.-2015.6.), Hyunjoon Yoo Architects
- 1) Research of Theme Park Planning and Citizen Satisfaction Improvement (2014.11.01-2014.11.30.), Bank of Korea

2016.3 - 2016.8., 2011.2. - 2011.6.

TEACHING ASSISTANT, YONSEI UNIV, SFSU.

- 2) teaching assistant of **Spatial Analysis and Location Theory** class under the professor Kabsung Kim in Yonsei Univ. in 2016
- 1) teaching assistant of **Data Analysis** class under the professor Ayse Pamuk in San Francisco State Univ. in 2011. I tutored ArcGIS and statistical analysis methods such as how to make a thematic map and implement t-test, ANOVA, and regression analysis.
 - Produced teaching materials
 - Tutored GIS software in Data Analysis Class

Occasionally gave lectures when the professor was absent

2011.1 - 2011.6.

HOUSING DIVISION INTERN, SAN FRANCISCO REDEVELOPMENT AGENCY

 Managed data for the "Housing Opportunities for Persons with AIDS (HOPWA)" program

EDUCATION

AUG 2019

PH.D. IN URBAN PLANNING AND ENGINEERING, YONSEI UNIV.

- Completion of the Joint Degree Program in Smart City
- Finished coursework (GPA: 4.16/4.3), enrolled 24 Classes (61 Credits total)
- Selected courses: Practice of Spatial Econometric Analysis, Spatial Analysis and Location Theory, Transitions in Urban Systems, Urban Safety Management, Disaster Analysis, Urban Safety Vulnerability Assessment, Urban Spatial Structure in the U-City, Evaluation of Transportation Plan, and so on.
- Scholarship Received
- Innovative Talent Education Program for Smart City (2014.8.8-2019.2.28) by Korea Ministry of Land, Infrastructure and Transport (MOLIT)
- Brain Korea (BK) Scholarship (2014 Fall, 2017 Spring, 2018 Spring)
- RA, PA, TA Scholarship (2015 Spring 2017 Spring, Five semesters)

FEB 2014

BACHELOR OF SCIENCE (B.S.) IN ENGINEERING, URBAN PLANNING AND ENGINEERING, YONSEI UNIV.

- GPA 3.83/4.30. Magna Cum Laude Feb 24, 2014
- Selected courses: C/C++ Programming, Engineering Mathematics, Traffic Engineering, Urban Spatial Information Analysis, Computer Aided Engineering, Engineering Economics, Engineering Economic Trends and Technology Management, and so on.
- Received Full (8 semesters) Scholarship, 'The National Scholarship for Science and Engineering' from Korea Student Aid Foundation)

AUG 2010 - JUNE 2011

EXCHANGE STUDENT IN SAN FRANCISCO STATE UNIV.

- Attended two semesters as an exchange student, took 10 classes (33 credit) courses total and recorded GPA 3.97/4.00.
- During this period, I was a teaching assistant in Data Analysis Class under the professor Ayse Pamuk and worked as an intern in San Francisco Redevelopment Agency (SFRA). •
- Selected courses: Data Analysis, Alternative Urban Futures, Public Sector Management, Projects in Teaching Urban Studies, Microeconomics, Research Methods.

FEB 2008

GRADUATED DAEGU SCIENCE HIGH SCHOOL

- Intensively trained according to the curriculum of science high school, which is for gifted students with talents in mathematics and sciences to make them become qualified researchers.
- Curriculum: http://www.ts.hs.kr/index.do?menuCd=MCD_0000000000000065084

SKILLS

- Spatial Analysis (with ArcGIS)
- Data Analysis (with R, SPSS, Stata)
- Feasibility Assessment (with Excel)
- Economic Simulation (with Matlab)
 - Machine Learning (with Python & R)
 - Data Visualization (with Python & R)

CERTIICATES

- SAS Certified Advanced Programmer for SAS 9, SAS, 2019-08
- SAS Certified Statistical Business Analyst Using SAS 9, SAS, 2018-08
- Survey Analyst, Senior, HRD Korea, 2018-12
- Transportation Engineer, HRD Korea, 2013-10
- **Urban Planning Engineer**, HRD Korea, 2013-06

PUBLICATIONS

- LEE, J.E., 2020. *The Reason of rising housing price in Corona Pandemic*, Trend:View Real Estate Trend Session's Expert Column, SEE:REAL, 2020-11-09.
- LEE, J.E., 2020. *Consumers' Sentiment and Routine, its Urban Change after Covid19 and our Counterplans.* Trend:View Real Estate Trend Session's Expert Column, SEE:REAL, 2020-08-10.
- LEE, J.E., 2019. *The Effects of Online Shopping on Urban Spatial Structure,* 25(4), The Journal of Korea Real Estate Analysts Association. 106.
- LEE, J.E., 2018. *Analyzing Dynamic Change of Spatial Structure Using the Rank Mobility Index (RMI) in Seoul City: the Period of 2000-2010.* 24(2), The Journal of Korea Real Estate Analysts Association. 89-103.

ORAL PRESENTATIONS

- 14) Lee, Lee, and Lee. (2021) "The Impact of COVID-19 Policy Responses on Mobility and Household Consumption", The 2021 Joint Real Estate Conference, AREUEA International Session: Household Mobility, July 20 9:00am–11:00am (EDT).
- 13) Lee, J. (2020) "The Lessons from the New York City's Residential District Zoning", 2020 Fall Congress of Korea Planning Association, 2020/10/30-31. Online Session.
- 12) Lee, J. and Kim, K. (2019) "Change in Market Areas between Offline and Online Market in Smart City Era", 2019 Spring Congress of Korea Planning Association, 2019/04/27. Gachon University, Seongnam-si, Gyeonggido, South Korea. nominated as a Session Best Paper
- 11) Lee, J. and Kim, K. (2017) "Analysis of Home-owner occupied Housing Households' Housing Cost Determinants in Seoul Metropolitan Area", 2017 Fall Congress of Korea Real Estate Analysts Association, 2017/12/8, Hanyang University, Seoul, South Korea.
- 10) Lee, J. and Kim, K. (2017) " Analysis of the Housing Burden of Homeowners in the Seoul Metropolitan Area Using the Gini Coefficient and Multiple Regression model", 2017 Fall Congress of Korea Urban Regeneration Association, 2017/11/24, Busan Metropolitan City Hall, Busan, South Korea. nominated as a Session Best Paper
- 9) Lee, J. and Kim, K. (2017) "How would housing burden be different by income levels and neighborhoods?", 2017 Fall Congress of Korea Planning Association. 2017/10/27-28. Daegu Haany University. Daegu. South Korea.

- 8) Lee, J., Noh, Y., Kim, K. (2017) "Comparison of land price increment rate in Urban high-tech industrial complex and General industrial complex", 2017 Spring Congress of Korea Planning Association, 2017/04/29, Yonsei University, Seoul, South Korea.
- 7) Lee, J., Choi, S., Kim, K. (2016) "Social Benefit Estimation of Lodging Certification System and its Implications", 2016 Fall Congress of Korea Planning Association. 2016/10/28-29. Sunchon National University. Sunchon. South Korea.
- 6) Lee, J. and Kim, K. (2016) "The Effect of Residential Environment Characteristics on Suicide Rate in Korea", 2016 Spring Congress of Korean Association for Housing Policy Studies (KAHPS). 2016/06/23. Land & Housing Institute (LHI). Daejeon. South Korea.
- 5) Lee, J. and Kim, K. (2016) "New Social Welfare Paradigm, Social Impact Bond Program Implications from the Analysis on Foreign Cases", 2016 Spring Congress of Korea Planning Association, 2016/04/30. Seoul University, Seoul. South Korea.
- 4) Lee, J. and Kim, K. (2015) Presented " How to Introduce Pay for Success in Urban Renewal Financing", 2015 Fall Congress of Korea Urban Regeneration Association, 2015/11/27. Gwangju University. Gwangju. South Korea. nominated as a Session Best Paper
- 3) Lee, J. (2015) "Fundamental Study on Applying SIB to CPTED Projects", 4th International Conference on Civil and Architecture Engineering (ICCAE'15), 2015/06/18-19. Pattaya. Thailand. nominated as a Session Best Paper
- 2) Lee, J., Kim, H., Kim, K., (2015) "A Study of Change in Spatial Structure of Seoul from 2000 to 2010 utilizing RMI", 2015 Spring Congress of Korea Planning Association, 2015/04/25. SeoKyeong University. Seoul. South Korea.
- 1) Lee, J. and Kim, K. (2014) Presented "How to introduce Social Impact Bond as an alternative financing method in urban regeneration", 2014 Fall Congress of Korea Planning Association. 2014/10/25. Chungbuk National University. Cheongju. South Korea.

ACTIVITIES

Professional Affiliations

- Korea Planning Association(from 2016.09.05)
- Korea Real Estate Analysts Association(from 2021.01.04)
- American Real Estate and Urban Economics Association (from 2021.10.27)

Professional Activities

- Press Interview/Media Exposure
- Kim, M. J. (2021, January 5). Home and city after Corona, various changes are coming. *Nocutnews*, https://www.nocutnews.co.kr/news/5475542>

panelist

- NOV 13, 2020 | Upcoming Scholar Exchange Committee Session of Korea Real estate Analysts Association. *Meaning of Basic Income and Housing Welfare.*
- SEP 18, 2020 | Real Estate Policy Committee Session of Korea Planning Association. *Use of Artificial Intelligence Techniques to Assess Architectural Aesthetics and Estimate the Rent Price of Office Buildings in Seoul.* Presenter: Won, Jaewoong

Teaching & Mentoring

NOV 8, 2021; OCT 29, 2021; JULY 16, 2021

CLIMATE CHANGE AND FUTURE STRATEGY, SEOUL HUMAN

RESOURCE DEVELOPMENT CENTER

• I gave on-line special lectures for public officials regarding the future strategy regarding the climate change and urban planning for three times two-hours each.

OCT 2020 - AUG 2021

MACHINE LEARNING AND VISUALIZATION WITH R & PYTHON.

• I run an **open lecture every Saturday** 8 p.m. **online(zoom)** to mentor and fulfill the eager of learning of the public including undergraduate school students admiring to get a job in data science field, office workers preparing to change their jobs, or people who want to acquire advanced data professional certificates.

MAR 2018 - NOW

STATISTICAL ANALYSIS USING SPSS/STATA/SAS, TALING INC.

• I have taught econometrics, statistics, and how to use SPSS, R and Stata to the public in diverse fields including undergraduate and graduate school students, doctors who want to analyze their patients' data, and office workers who need to learn data analysis as a private tutor affiliated with Taling Inc.

Leadership

2018.06 - 2018.07, 17 DAYS

EWHA-LUCE INTERNATIONAL SEMINAR, HENRY-LUCE FOUNDATION & EWHA WOMANS UNIVERSITY

- nominated as a participant of Women Scholar Leadership Program for 17 days supported by Henry-Luce Foundation & Ewha Womans University
- Presented my research and got feedback from the other participants, interacted in an Interdisciplinary academic condition throughout the seminar days
- Trained how to communicate with coworkers and how to be a responsible leader through the leadership program

2016.03 - 2018.02, 2 YEARS

CHIEF STUDENT, DEPARTMENT OF URBAN PLANNING AND ENGINEERING AT YONSEI UNIVERSITY

- As a chief student in my major, I planned and managed events to promote good fellowship between the graduate school labs, student membership training programs, and other department events
- Held a graduate school orientation for the freshmen Participated regular meetings as a representative student of Urban Planning and Engineering Major
- Welcomed foreign visitors from other countries' urban planning graduate school students and professors and gave presentation to Introduce my school department

Education Volunteering

2019.07.19 - 2019.07.30, 11 DAYS

EDUCATION VOLUNTEERING TEAM LEADER, ONNUR! COMMUNITY CENTER, CAMBODIA

• taught physical education, hygiene habits, music, art to elementary school students

• managed overall process as a team leader including recruiting and training members, assigning roles, communicating with sub-leaders, etc.

2014.01.12 - 2014.01.24, 13 DAYS

EDUCATION VOLUNTEERING, PEACE SCHOOL, LIFE UNIVERSITY, KOICA CENTER IN **CAMBODIA**

• volunteered as a **guest teacher** in PEACE School, Life University, and KOICA. (5 days in PEACE School, 6 days in Life University, 2 days in KOICA)

2013.06.28 - 2013.07.07, 10 DAYS

EDUCATION VOLUNTEERING, PEACE SCHOOL IN CAMBODIA

• Volunteered in PEACE School as a teacher of Science, English, Korean, and other extracurricular activities