Curriculum Vitae

Wan Hee Kim
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EDUCATION

2023 – Present **Ph.D. Student**, Geography and Sustainability, University of Tennessee, Knoxville
Minor: Computational Science
Research Interests: GIScience, Transport Geography, Network Analysis, Location Modeling, Spatial Optimization

2018 **M.A.**, Geography, Seoul National University
Thesis: A study on Spatio-temporal occupation patterns in urban areas, through Mobile Big Data (Advisor: Geonhak Lee)

2016 **B.A.,** Geography, Sangmyung University

PEER-REVIEWED JOURNAL PUBLICATIONS

2026 **Wanhee Kim,** Hyun Kim, Paul Jung**.** Maritime hub-corridors: examining the spatial structure in global maritime networks. *Journal of Geographical Systems.* https://doi.org/10.1007/s10109-026-00519-1

2025 **Wanhee Kim**, Hyun Kim, and Yonghwan Chun. A Spatially Informed Solving Approach for the Traveling Salesman Problem. *The Professional Geographer*, *77*(6), 690–703. https://doi.org/10.1080/00330124.2025.2565474

2025 Yim, Jongseo, **Kim, Wan,** Cho, Sung-Jin, Chan Woong, Kim and Park, Jae-Young. Investigating maritime traffic routes: integrating AIS data and topographic statistics. *Maritime Policy & Management.* 52(4), 590-608

2018 **Wanhee Kim**, Jongseo Yim, and Ahyun Song. Spatio-temporal Changes of the Agglomerated Marketplace by the Use of the Pedestrian Flow Data: A case study of Hongdae Area. *Journal of the Korean Cartographic Association.* 18(1), 49-63

2016 Geonhak Lee, Chanwoo Jin, Jiwoo Kim, and **Wanhee Kim**, (2016), A Study on the Characteristics of the Spatial Distribution of Sex Crimes: Spatial analysis based on environmental criminology, *Journal of the Korean Geographic Society*. 51(6), 853-871

PRESENTATIONS

2026 **Wanhee Kim** and Hyun Kim. *Detecting Hub-Corridors for Ground Transportation Network*. North American Regional Science Council Annual Meeting

2026 **Wanhee Kim** and Hyun Kim. *Detecting Hub-Corridors for Transportation Network*. American Association of Geographers Annual Meeting

2025 **Wanhee Kim**, Hyun Kim, and Paul Jung. *Proposing a novel concept of Maritime hub-corridors.* North American Regional Science Council Annual Meeting

2025 **Wanhee Kim**, Hyun Kim, and Paul Jung. *Maritime hub-corridors: Examining the Spatial Structure in Global Maritime Networks.* International Association of Maritime Economist Annual Meeting

2025 **Wanhee Kim**. *A spatially informed solving approach for the Traveling Salesman Problem.* American Association of Geographers Annual Meeting

2024 **Wanhee Kim**, Changwha Oh, and Hyun Kim. *Geographic Disparities in Pediatric Care: Analyzing Accessibility in Seoul, South Korea*. International Medical Geography Symposium Annual Meeting

2024 **Wanhee Kim**, Hyun Kim, Yonghwan Chun. *The Travel Salesman Problem with Spatial Information*. American Association of Geographers Annual Meeting

2024 **Wanhee Kim**, *Panelist in Young Korean Geographers Forum.* American Association of Geographers Annual Meeting

2023 Jongseo Yim, **Wan Hee Kim**, Sung Jin Cho (Presenter), Chan Woong Kim and Jae Young, Park. *Methodology for Designating Maritime Traffic Route Network using AIS Data and Topographic Statistics*, The 11th International Conference on Logistics and Maritime Systems

2018 **Wanhee Kim**, Jongseo Yim, and Ahyun Song. *Spatio-temporal Changes of the Agglomerated Marketplace by the Use of the Pedestrian Flow Data: A case study of Hongdae Area*. Korean Geographical Society Annual Meeting

2017 **Wanhee Kim**. *Analyzing Dynamics of Urban population distribution in a Micro-scale through the Mobile big data: Using Spatio-temporal clustering*. Korean Cartographic Association annual meeting

2017 **Wanhee Kim**. *A Study on the Dynamics of Urban Population Distribution: Using Local Bivariate Moran's I*, The 12th Korea-China-Japan Joint Conference on Geography

2017 **Wanhee Kim**, and Geonhak Lee. *Analyzing Population Dynamics in Urban Aarea, using Spatio-temporal Cluster Modeling*. Korean Geographical Society Annual Meeting

2017 **Wanhee Kim**. *The spatial distribution of economies in Korea in terms of GRDP-using dasymetric mapping*. American Association of Geographers Annual Meeting

2017 Junbeom Bahk (Presenter), **Wanhee Kim**, and Qiuhong Jin. *Spatial pattern of wildlife-vehicle collision according to topographical conditions of national park roads in South Korea*. American Association of Geographers Annual Meeting

BOOK PUBLICATION

2020 Naval Intelligence Group. *Handbook of Ocean Environment in Mine Warfare Classified Intelligence* (*Classified Intelligence)
Contents: Analysis of Ocean Environment and Optimized Spatial solution for Mine Warfare in Korea

TEACHING EXPERIENCES

University of Tennessee

Guest Lecturer

Geography of Transportation	Spring 2026

Lab Instructor (Spatial Statistics / GIScience)

Quantitative Methods in Geography	Fall 2026; 2025
Topics in Quantitative Geography	Spring 2026
Geo-visualization and Geographic Information Science	Spring 2025

Teaching Assistant

Geography of Transportation	Spring 2025;2026
World Geography	Spring 2024

Seoul National University

Lab Instructor

Computer Cartography	Spring 2017
Big Data Insight (GIS & Geographic Visualization Using R programming)	Summer 2016

EMPLOYMENT HISTORY

Teaching Assistant, University of Tennessee, Knoxville 2023 - Present
Lab instructor for Spatial Statistic Courses for both Graduate and Undergraduate Level (Used Python and R programming)

Research Assistant, **The Center for Transportation Research, Tennessee** 2024
Participated in developing Tennessee Statewide Travel Model

External Researcher, Korea Research Institute for Human Settlement 2022 - 2023
Analyzed Spatial Big Data including 'Card Usage Data' and Mobile Phone Big

data

External Researcher (Technical Advisor), **Korea Research Institute for Human Settlement** 2022
Visualized Spatial Data and Reviewing the Report

Spatial data analyst, Route Development Team, **Hyundai AutoEver** 2022
Analyzed Trajectory Data to develop Route Searching Algorithms

Intelligence Officer, Naval Intelligence Group**, Republic of Korea Navy** 2018 - 2021
Imagery Intelligence Branch 2021
Managed Imagery Intelligence Branch
Analyzed UAV & Remote Sensing Data
Analyzed Naval Intelligence in ROK-US Combined Command Post Training
Ocean Environmental Intelligence Branch 2019 - 2021
Analyzed Ocean Environment & Submarine Topography using GIS
Analyzed Spatially Optimized Area for Military Operation
Intelligence Vessel 2019
Managed Imagery Intelligence Team
Analyzed UAV & Remote Sensing Data
Naval Academy 2018 -2019
Officer trainee

Intern, Microsoft Korea 2015
Developed a B2B marketing strategy

RESEARCH EXPERIENCES

Research Assistant, Center for Transportation Research 2024
Research Project: **Developing Tennessee Statewide Travel Demand Model**

Research Assistant, University of Tennessee, Knoxville 2023 - 2024
Research Project (NSF project) **Integrating Spatial Autocorrelation into Location-Allocation Problem**

External Researcher, Korea Research Institute for Human Settlement, 2022 - 2023
Research Project: **Diagnosis of changes in Urban Spatial Structure using Spatial Big data**

External Researcher (Technical Advisor), Korea Research Institute for Human Settlement, 2022
Research Project: **2022 National Territorial Monitoring Report**

External Researcher (Technical Advisor), Korea Maritime Institute 2021
Research Project**: Operation and Management of Marine Spatial**

Planning Evaluation

Intelligence Officer, Naval Intelligence Group, Republic of Korea Navy — 2019 - 2021
Produced over 50 reports using GIS about Imagery Intelligence and Oceanography Intelligence

Research Assistant, Korea Research Institute for Human Settlement — 2017
Research Project: **Estimation of Correlation between the Innovative City and Surrounding Areas**

Research Assistant, Seoul National University — 2016 - 2017
Research Project: **Research of spatial and environmental factors of sex crime and optimization of crime prevention facilities**

Research Assistant, Gyeonggi Content Agency — 2016
Research Project: **A plan to build Big Data Operation Center in a Special area for Big Data utilization**

HONORS & AWARDS

2025 Steward K. McCroskey Memorial Fund at University of Tennessee Knoxville

2025 GSS Travel Awards. Graduate Student Senate at University of Tennessee Knoxville

2025 **Finalist**. **AAG John Odland Award** (SAM student paper competition) at American Association of Geographers Annual Meeting

2024 GSS Travel Awards. Graduate Student Senate at University of Tennessee Knoxville

2024 Student Travel Award. The American Association of Geographers Spatial Analysis and Modeling Specialty Group

2024 KAGES Sim Student Travel Award. Korea-America Association for Geospatial and Environmental Sciences

2024 GSS Travel Awards. Graduate Student Senate at University of Tennessee Knoxville

2020 **Naval Operation Commander's Commendation** (Awarded underwriting 'Ocean Environment of Mine Warfare)

2018 **Best Paper Award**. Korean Cartographic Association

2017 Research Scholarship. National Research Foundation of Korea (Brain Korea 21+)

2016 Research Scholarship. National Research Foundation of Korea (Brain Korea 21+)

2016 Merit-based Scholarship. Seoul National University

INSTITUTIONAL SERVICES

College Level

University of Tennessee, Knoxville

President, Korean Graduate Student Association	2025 - 2026
Treasurer, Korean Graduate Student Association	2024 - 2025

TECHNOLOGIES

CPLEX: Linear programming

Programming Language (Python, R): Spatial and Spatio-temporal analysis and taught spatial statistics for undergraduate and graduate students

SQL: Data Preprocessing

GIS Tools (ArcGIS, QGIS, SNAP): Spatial and spatiotemporal data analysis & mapping

Kepler, Flourish: Data Visualizing