

Madiha Bencekri, Ph.D.

Ph.D. Assistant Researcher Professor

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RESEARCH INTERESTS

Transportation Engineering, Urban Planning, Geographic
Information Systems, Data Analytics, and Machine Learning.

Transport Planning, Sustainable
Mobility, Smart City.

EDUCATION

University of Seoul <i>Ph.D. Transportation Engineering & Smart Cities</i>	Seoul, South Korea March 2019 – Feb 2024
University of Seoul <i>M.S. Urban and Regional Development</i>	Seoul, South Korea Aug 2015 – Feb 2017
Institut National des Postes et Télécommunications <i>M.S. in Telecommunications and Computer Engineering</i>	Rabat, Morocco Sep 2007 – June 2010
Classes Préparatoires des Grandes Ecoles d'Ingénieur <i>B.S. in Mathematics and Physics</i>	Marrakech, Morocco Sep 2004 – June 2007

ACADEMIC APPOINTMENTS

University of Seoul <i>Assistant Research Professor</i>	Seoul, South Korea March 2024 – Present
University of Seoul <i>Assistant Researcher</i>	Seoul, South Korea March 2019 – Feb 2024

INDUSTRIAL EXPERIENCE

Casablanca-Settat Regional Government <i>Transport Service Manager</i>	Casablanca, Morocco March 2017 – Feb 2019
Korea Land and Housing Corporation <i>International Consultant</i>	Seoul, South Korea Jan 2016 – Aug 2016

Casablanca Metropolitan City Government	Casablanca, Morocco
<i>Manager of the Urban Mobility Service</i>	Sep 2011 – June 2015

SKILLS

Transportation and City Planning
<i>Transport Modelling: INRO's EMME, Bentley CUBE, Caliper TransCAD, & PTV Visum/Vissim</i>
Geographic Information Systems
<i>ArcGIS Desktop, ArcGIS Pro, ArcGIS City Engine, & QGIS</i>
Machine Learning & Data Analytics
<i>Python, R (R-Studio), STATA, LIMDEP, Tableau, & SPSS</i>
Others
<i>MATLAB, MATLAB Simulink, MySQL Workbench, Microsoft Visio (UML), & Smart PLS (SEM)</i>

AWARDS

Recipient of the Distinguished Paper Award <i>Transportation Engineering Department, University of Seoul</i>	2024
Recipient of the University of Seoul Smart City Department Scholarship <i>Smart City Department, University of Seoul</i>	2020
Recipient of the University of Seoul International Ph.D. Scholarship <i>University of Seoul</i>	2019 – 2020
Recipient of Distinguished Academic Performance (Master Studies) <i>University of Seoul</i>	2016
Recipient of KOICA Scholarship (Master Studies) <i>University of Seoul</i>	2015 – 2016

PUBLICATIONS

Papers Under Review:

- [1] **Bencekri, M.**, & Lee, S*. (2024). Enhancing Quality of Service of Paratransit: Insights and Lessons from Casablanca, Morocco. *Transport Policy* (Submission: April 24th, 2024).
- [2] **Bencekri, M.**, Kwak, J., Lee, D., Csiba-Herczeg, A., & Lee, S*. (2024). Assessing the 15-Minute City Framework as a Tool for Natural Heritage Preservation in the Anthropocene Epoch. *International Journal of Urban Sciences* (Submission: May 24th, 2024).
- [3] **Bencekri, M.**, Kwak, J., Lee, J., Lee, J., Kim, S., & Lee, S*. (2024). Mapping Mental Health Needs: A Spatial Analysis of Income Inequality, and Healthcare and Cycling Deficiencies. *Social Science and Medicine* (Submission: October 31st, 2024).

- [4] **Bencekri, M., & Lee, S*.** (2024). Integrating Mental Health Metrics into Proximity-Centered Public Transit Planning: Insights from Seoul. *Transportation Research Part A: Transport Planning and Policy - TRSS Conference (Submission: November 15th, 2024).*

Book Under review:

- [1] **Bencekri, M., & Lee, S*.** (2024). Sustainable Urban Evolution: the 15-minute city as a future paradigm. *Springer Book Production (Submission: June 30th, 2024, Review received November 1st, 2024).*

Published Papers:

- [1] **Bencekri, M., Fan, YV., Lee, D., Choi, M., & Lee, S*.** (2024). Optimization of shared bikes system to unlock their economic benefits: land use mix and retail activity. *Journal of Transport Geography (Accepted: June 12th, 2024).*
- [2] **Bencekri, M., Kim, S., Fan, YV., & Lee, S*.** (2024). Optimizing Carbon-Focused Allocation of Mobility Hubs Using Genetic Algorithms and Ensemble-based Suitability Analysis. *Scientific Reports-Nature (Accepted: May 21st, 2024)*
- [3] Kwak, J., Ku, D., Jo, J., **Bencekri, M., Choi, M., & Lee, S*.** (2024). Travel Demand Management Strategies to Mitigate Climate Change. *ICE Proceedings Municipal Engineering.*
- [4] **Bencekri, M., Lee, D., Ku, D., & Lee, S*.** (2023). A Planning Support System for Boosting Walkability. *ICE Proceedings Municipal Engineering.*
- [5] **Bencekri, M., Lee, D., Kim, S., Shin, S., & Lee, S*.** (2023). Equity-Based Allocation of Mobility Hubs in Seoul. *Chemical Engineering Transactions.*
- [6] **Bencekri, M., Ku, D., Lee, D., Fan, YV., Klemes, JJ., Varbanov, S., & Lee, S*.** (2023). The Elasticity and Efficiency of Carbon Reduction Strategies in Transportation. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects.*
- [7] **Bencekri, M., Lee, D., Ku, D., & Lee, S*.** (2022). Investigating Carbon Emissions in Korea. *Chemical Engineering Transactions.*
- [8] Tamakloe, R., Sam, EF., **Bencekri, M., Das, S., & Park, D*.** (2022). Mining Groups of Factors Influencing Bus/Minibus Crash Severities on Poor Pavement Conditions Roads Considering Different Lighting Status. *Traffic Injury Prevention.*
- [9] **Bencekri, M., Ku, D., Kwak, J., Kim, J., & Lee, S*.** (2021). Review of Eco-Friendly Guidance of Transport Infrastructure: Korea and the World. *Chemical Engineering Transactions.*
- [10] Ku, D., **Bencekri, M., Kim, J., Lee, S., & Lee, S*.** (2020). Review of European Low Emission Zone Policy. *Chemical Engineering Transactions.*
- [11] **Bencekri, M., Ku, D., Na, S., Lee, S., & Lee, S*.** (2019). Parking Policies Review: Europe Study Case. *International Journal of Transportation.*
- [12] **Bencekri, M., Ku, D., Lee, S., & Lee, S*.** (2019). Congestion Pricing Policy in Europe. *International Journal of Transportation.*

Conference Papers:

- [1] **Bencekri, M., Ku, D., & Lee, S*.** (2023). Planning Support System for Boosting Bikeability in Seoul. *Computational Urban Planning and Urban Management (CUPUM), Montreal, Canada.*
- [2] **Bencekri, M., Kim, D., Ku, D., Lee, D., & Lee, S*.** (2023). A Hierarchical approach to solve p-mobility hub location problems to reduce carbonization. *10th International Symposium on Transportation Data & Modelling (ISTDM23), Ispra, Italy.*
- [3] ***Bencekri, M., Founoun, A., Haqiq, A., & Hayar, A.** (2022). Investigation of Shared Bike Demand Using Data Analytics. *IEEE International Smart Cities Conference (ISC2), Pafos, Cyprus.*
- [4] ***Bencekri, M., Kweon, S., Kang, G., & Lee, S.** (2020). Economic Impact Assessment Model for Low Emission Zone Policy. *The Korean Society of Transportation Conference, Seoul, Korea Republic Of.*

- [5] *Bencekri, M., & Lee, S. (2021). Identification of Key Factors Influencing Biking in Seoul. *International Student Conference on Advanced Science and Technology (ICAST), Kumamoto, Japan.*
- [6] *Bencekri, M., & Lee, S. (2020). GIS-Based Accessibility Assessment within Yeouido. *International Student Conference on Advanced Science and Technology (ICAST), Kumamoto, Japan.*
- [7] *Bencekri, M., Ku, D., & Lee, S. (2020). UNA-Based Accessibility Assessment. *The Korean Society of Transportation Conference, Seoul, Korea Republic Of.*
- [8] *Bencekri, M., & Lee, S. (2019). Smart Parking in Digital Twin. *International Student Conference on Advanced Science and Technology (ICAST), Kumamoto, Japan.*

Published Book Chapters:

- [1] Bencekri, M., Ku, D., Lee, D., & Lee, S*. (2023). A Planning Support System for Boosting Bikeability in Seoul. *Intelligence for Future Cities: Planning Through Big Data and Urban Analytics. Springer.*
- [2] Bencekri, M., Kim, D., Ku, D., Lee, D., & Lee, S*. (2023). A Hierarchical approach to solve p-mobility hub location problems to reduce carbonization. *10th International Symposium on Transportation Data & Modelling (ISTDM23).*
- [3] *Lee, S. & Bencekri, M. (2021). Analysis of Skip-and-Stop Planning Using Smart Card Data. *The Routledge Handbook of Public Transport (1st Edition). Taylor & Francis Group.*
- [4] *Lee, S. & Bencekri, M. (2020). Urban Form and Public Transport Design. *Urban Form and Accessibility: Social, Economic, and Environment Impacts. Elsevier.*

Advisory of Master Students' Thesis:

- [1] Kalili, L. (2019). Comparative Analysis of the Project Appraisal Guidance.
- [2] Yalelet, K. (2020). Performance Evaluation of Road Network: A Case Study of Ayat-Megenagna Roads of Addis Ababa City.
- [3] Acharya, S. (2022). Measurement of Accessibility to Road Network Using Space Syntax in Pokhara, Nepal
- [4] Soe, W. (2022). Identification of Maintenance Factors in Rolling Stock Based on Exploratory Factor Analysis.
- [5] Muluken, A. (2022). Evaluation of Urban Road Network Optimization Based on Random Utility Model.
- [6] Gulmaliyeva, N. (2023). Transition Strategy to Sustainability of Urban Mobility in Baku, Azerbaijan Using a Backcasting Scenario Approach.
- [7] Uwase, S. (2023). Assessing the implications of Real-Time Bus Information System (RT-BIS) from user perspective in developing cities: case study Kigali
- [8] Sultonov, A. (2024). Development of the BRT in Tashkent City: Demand Forecast of Pilot BRT Line in Shota Rustaveli Street.
- [9] Jalilov, J. (2024). Analysis of the Potential of Transit-Oriented Development Around Metro Stations of Tashkent.

REVIEWING SERVICE

Plos One
Civil Engineering (Proceedings of the ICE)
Transport (Proceedings of the ICE)
Sustainable Cities and Society
International Journal of Urban Sciences (IJUS)

