

# Shahriar Iqbal Zame

 Ph.D. Researcher (TSE, TUM)

 M.Sc. in Transportation Systems, TUM

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## Summary

I am a [Research Associate and PhD candidate](#) at the Technical University of Munich (TUM), Chair of Transportation Systems Engineering. My research on the DFG-funded project "[Shaping E-Roads Efficiency for Freight Automation](#)" (SEE-FAR) leverages agent-based simulations to advance freight transport electrification and automation. By exploring innovative charging solutions my work aims to significantly improve sustainability, reduce emissions, and enhance economic efficiency in long-haul logistics. With an M.Sc. in Transportation Systems from TUM, my expertise includes agent-based modeling, optimization, choice modelling and large-scale simulations, alongside practical experience with cutting-edge tools such as MATSim, High Performance Computing, and advanced programming (Python, Java, R). Driven by a passion for innovation and sustainable urban mobility, I am dedicated to contributing impactful research that addresses contemporary urban challenges through innovation and transformative approaches.

## Education

- 2025 – Present      **Research Associate & Ph.D. Candidate,**  
*Technical University of Munich (TUM), Munich, Germany*  
Project: [Shaping E-roads Efficiency for Freight Automation \(SEE-FAR\)](#)  
A joint initiative of [TUM's TSE](#) and [BOKU's Ive](#)  
Supervisors: Prof. Dr. Constantinos Antoniou, Prof. Dr. Yusak Susilo
- 2021 – 2024      **M.Sc. in Transportation Systems,**  
*Technical University of Munich (TUM), Munich, Germany*  
CGPA 1.6/4.00 (best 1.0 out of 4.0)  
Thesis: [UAM siting approach considering capacity and land use: A case study of Munich](#)  
Supervisors: Prof. Dr. Constantinos Antoniou, M.Sc. Hao Wu  
Johannes B. Ortner-Stiftung Award for outstanding Master Thesis
- 2014 – 2017      **B.Sc. in Civil and Environmental Engineering**  
*Islamic University of Technology, Bangladesh*  
CGPA 3.37/4.00 (best 4.0 out of 4.0)  
Thesis: [Comparing Comfort in Public Transports in Dhaka, Bangladesh](#)

## Experience

- 2017 – 2022      Research Engineer, [Icon Engineering Services Ltd.](#), Bangladesh  
**Projects:** Dhaka Metro Rail Project, First Dhaka Elevated Expressway, Hazrat Shahjalal International Airport Terminal 3 Expansion Project  
**Responsibilities:** Structural Quality Control of 750+ foundations, Managed [Commercial Website](#) Development, Published [Corporate brochure](#) & [Multimedia Content](#).

## Research Publications

- 3 [A sustainable multi-objective framework for multi-phased, capacitated vertiport siting with land use integration.](#)  
Hao Wu, **Shahriar Iqbal Zame**, Tao Guo, Qing-Long Lu, Constantinos Antoniou

- 2 [Data-driven vertiport siting: A comparative analysis of clustering methods for Urban Air Mobility.](#)  
Tao Guo, Hao Wu, **Shahriar Iqbal Zame**, Constantinos Antoniou  
*Journal of Urban Mobility*, Volume 7, 2025
- 1 Developing and testing robust data-driven car-following models  
Filippos Adamidis, **Shahriar Iqbal Zame**, Constantinos Antoniou  
*IET Intelligent Transport Systems*, Under review.






## Skills

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<b>Modeling</b>	Agent-based transport simulation (MATSim and extensions), macroscopic 4-step travel demand modeling, multimodal network modeling for urban mobility systems.
<b>Optimization</b>	Multi-objective optimization, routing and scheduling (e.g., TSP, VRP), heuristic and algorithmic approaches for transport and infrastructure planning.
<b>Programming &amp; AI</b>	Java (OOP), Python, R, MATLAB, SQL, Shell scripting, Pandas, NumPy, Scikit-learn, Machine learning, Transfer learning.
<b>Technical Tools</b>	High-performance computing (Linux, Slurm), geospatial toolchains (QGIS, PostGIS, GDAL), scripting and version control (Python, Bash, Git), development environments (Jupyter, VS Code).
<b>Research</b>	Peer-reviewed academic writing, systematic literature reviews, large-scale transport simulations, interdisciplinary research, LaTeX typesetting.
<b>Leadership</b>	Innovation mindset, project leadership, stakeholder engagement, intercultural teamwork, ethics.
<b>Creative Engagement</b>	Photography, video editing, website management, brochure and article design; visual storytelling for public outreach.

## Awards & Creative Projects

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- 2025  Johannes B. Ortner Foundation Prize for Outstanding Young Researcher at TUM.  
Recognized for outstanding Master's thesis; prize of €1,500, awarded at the TUM Awards Dinner.
- 2023  [Bicycling from Kufstein to Trento \(300+ km in 3 days\)](#)
- 2017  [CycleDhaka: Champion of Inter-University Film Fest \(Cennovation, IUT\)](#)
- 2016  [Volunteering: Light of Hope \(Children Education\)](#)
- 2015  [Volunteering: It's Humanity Foundation \(Fighting Poverty\)](#)