

Shahriar Iqbal Zame

 Ph.D. Researcher (TSE, TUM)

 M.Sc. in Transportation Systems, TUM

 Johannes B. Ortner Foundation Prize 2025, TUM

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 shahriar-iqbal-zame



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) uses agent-based simulation to advance the electrification and automation of freight transport, exploring charging solutions that improve sustainability and economic efficiency in long-haul logistics. My expertise spans agent-based modeling, optimization, choice modelling and large-scale simulation, with experience in MATSim, high-performance computing, and programming in Python, Java and R.

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
Member, [EIT Urban Mobility Doctoral Training Network \(DTN\)](#)
- 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 considering capacity and land use in Munich](#) (Graded 1.0)
Supervisors: Prof. Dr. Constantinos Antoniou, M.Sc. Hao Wu
[Johannes B. Ortner Foundation Prize](#) — outstanding early-career research; €1,500.
- 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, First Dhaka Elevated Expressway, Shahjalal Airport Terminal 3
Responsibilities: Structural Quality Control of 750+ foundations, Managed [Commercial Website](#) Development, Published [Corporate brochure](#) & [Multimedia Content](#).

Research Publications

- 4 [Comparative analysis of interpretable data-driven and analytical car-following models on highways: Robustness, sensitivity and transferability.](#)
Filippos Adamidis, **Shahriar Iqbal Zame**, Constantinos Antoniou
IET Intelligent Transport Systems, Volume 20, Issue 1, 2026, e70240.
- 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
Communications in Transportation Research, Volume 5, 2025.

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 Evidence-based decision-support framework for UAM siting, considering land use factors.

Shahriar Iqbal Zame, Hao Wu, Tao Guo, Wei-Chieh Huang, Constantinos Antoniou
Transportation Research Symposium 2025, Rotterdam, May 25 - 28, 2025.

Academic Service & Training

Peer Review

- 2026  *Journal of Urban Mobility* (Elsevier) — 2 manuscripts reviewed
- 2026  28th Annual Conference of the EURO Working Group on Transportation (EWGT 2026), Kraków, Poland — 5 manuscripts reviewed

Workshop Organization

- Jul 2026  Organizing team, [1st SEE-FAr Workshop: Recent Advances in Electric and Automated Road Freight Transport](#), TUM

Talks

- Jul 2026  *Freight OD Estimation from Fleet GPS and Traffic Counts: What Bavaria Validated and Austria Taught Us* — 1st SEE-FAr Workshop, TUM

Training

- Jan 2026  [Discrete Choice Analysis: Predicting Individual Behavior and Market Demand](#), TRANSP-OR, EPFL, Switzerland
Random utility models, nested and mixed logit, hybrid choice models, Bayesian estimation and forecasting; hands-on estimation in BIOGEME.

Skills

Modeling	Agent-based transport simulation (MATSim and extensions), macroscopic 4-step travel demand modeling, multimodal network modeling for urban mobility systems.
Optimization	Multi-objective optimization, routing and scheduling (e.g., TSP, VRP), heuristic and algorithmic approaches for transport and infrastructure planning.
Programming & AI	Java (OOP), Python, R, MATLAB, SQL, Shell scripting, Pandas, NumPy, Scikit-learn, Machine learning, Transfer learning.
Technical Tools	High-performance computing (Linux, Slurm), geospatial toolchains (QGIS, PostGIS, GDAL), scripting and version control (Python, Bash, Git), development environments (Jupyter, VS Code).
Research	Peer-reviewed academic writing, systematic literature reviews, large-scale transport simulations, interdisciplinary research, LaTeX typesetting.

Creative Projects & Volunteering

- 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 \(Fighting Poverty\)](#)