# Takahiro Matsunaga

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#### Education

Ph.D. in Civil Engineering, the University of Tokyo

Since 2025.10

M.S. in Civil Engineering, the University of Tokyo (Outstanding Paper Award)

2024.04 - 2025.09

B.S. in Civil Engineering, the University of Tokyo (Best Paper Award)

2020.04 - 2024.03

### Journal Articles

- [1] Takahiro Matsunaga and Eiji Hato. "MeanField Dynamics for Pedestrian Interaction in Quantized Observation-Based 3D Route Choice Modeling". en. In: Transportation Research Part C: Emerging Technologies (). revised and resubmitted, under review.
- [9] 松永 隆宏 and 羽藤 英二. "BLE 観測の不確実性を考慮した屋内 3 次元経路選択モデルの推定". ja. In: **都市計画論文集** 59.3 (2024). 査読あり, pp. 1683–1690.

#### International Conferences

- [2] Takahiro Matsunaga and Eiji Hato. "Interaction of 3D pedestrian flow in a congested railway station: Structural estimation based on Mean Field Game theory". In: *The 12th International Conference on Pedestrian and Evacuation Dynamics (PED 2025)*. Peer-reviewed, accepted, oral presentation. Prague, Czech Republic, Sept. 2025.
- [7] Takahiro Matsunaga and Eiji Hato. "Joint Estimation of Latent OD Matrix and 3D Route Choice Model Across Railway Station Boundaries based on Manifold Learning". In: The 28th International Conference of Hong Kong Society for Transportation Studies (HKSTS 2024). Peer-reviewed, oral presentation. Hong Kong, Dec. 2024.
- [8] Takahiro Matsunaga and Eiji Hato. "Three-Dimensional Pedestrian Route Choice Model with Quantization of Observational Uncertainty". In: IEEE International Conference on Intelligent Transportation Systems (ITSC). Peer-reviewed, oral presentation. Edmonton, Canada, Sept. 2024.

## **Domestic Conferences**

- [6] 松永 隆宏 and 羽藤 英二. "複雑な day-to-day 活動動態学習に基づく首都圏アクティビティ生成モデル". ja. In: **交通工学研究発表会**. 査読なし・口頭発表. 2025.
- [11] Takeshi Suzuki, Koji Saito, Atsushi Yamazaki, Seiichiro Honda, Eiji Hato, Ryoji Ishii, and Takahiro Matsunaga. "渋谷駅山手線線路切換工事時における多様な観測データを用いた行動変容の実態分析". Japanese. In: vol. 68. Japan: 土木計画学研究発表会・講演集, Nov. 2023.

#### **Awards**

- [3] Outstanding Master Thesis. The Department of Civil Engineering, The University of Tokyo, 2025.
- [4] Outstanding Research Presentation. Japan Society of Traffic Engineers, 2025.
- [5] 優秀修士論文. 東京大学大学院 工学系研究科社会基盤学専攻, 2025.

- [10] Best Graduation Thesis. The Department of Civil Engineering, The University of Tokyo, 2023.
- [12] 最優秀卒業論文. 東京大学 工学部社会基盤学科, 2023.