Dang Viet Anh Nguyen

PhD Student in Intelligent Transportation Systems,
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Education

2023 – Present	**PhD Student in Intelligent Transportation Systems** Technical University of Denmark (DTU), Denmark Project: Proactive traffic control through AI and Big Data Supervisors: Filipe Rodrigues , Carlos Lima Azevedo
2021-2022	**MSc. Supply Chain and Logistics** Nanyang Technological University (NTU), Singapore Thesis: Two-echelon Vehicle Routing Problem for Post-disaster Aid Advisor: Rajesh Piplani
2015-2020	**BE in Transportation Engineering** Hanoi University of Civil Engineering (HUCE), Vietnam Awards: Third Prize, Vietnam Olympiad on Mechanics; Student with Five Good Merits (National Level)

Employment

2022 – 2023	**Research Engineer – Intelligent Systems and Optimization** Singapore Management University (SMU), Singapore Project: "E-waste must never be wasted: Vehicle Route Planning Optimization for E-Waste Collection" Supervisors: Aldy Gunawan
2020-2021	**Research Assistant – Transportation and Traffic Simulation Lab** Hanoi University of Civil Engineering (HUCE), Vietnam Project: Optimization Models for Urban Freight Distribution Supervisors: Viet Phuong Nguyen

Publications

Nguyen, D. V. A., Azevedo, C. L., Toledo, T., & Rodrigues, F. (2025). Robustness of Reinforcement Learning-Based Traffic Signal Control under Incidents: A Comparative Study. arXiv preprint arXiv:2506.13836. (Under review)

Nguyen, D. V. A., Flensburg, J. V., Cerreto, F., Pascariu, B., Pellegrini, P., Azevedo, C. L., & Rodrigues, F. (2024). Multi-Graph Inductive Representation Learning for Large-Scale Urban Rail Demand Prediction under Disruptions. arXiv preprint arXiv:2408.15619. (Under review)

Nguyen, D. V. A., Gunawan, A., Misir, M., Hui, L. K., & Vansteenwegen, P. (2025). Deep reinforcement learning for solving the stochastic e-waste collection problem. *European Journal of Operational Research.*

Nguyen, D. V. A., Gunawan, A., Misir, M., & Vansteenwegen, P. (2024, April). Q-learning based framework for solving the stochastic e-waste collection problem. In *European Conference on Evolutionary Computation in Combinatorial Optimization (Part of EvoStar)* (pp. 49-64). Cham: Springer Nature Switzerland.

Gunawan, A., Hoe, S. L., Lim, X. Y., Tran, L. C., & **Nguyen, D. V. A.** (2023, December). ExploreLah: Personalised and Smart Trip Planner for Mobile Tourism. In *2023 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 0923-0927). IEEE.

Gunawan, A., **Nguyen, D. V. A.,** Nguyen, P. K. M., & Vansteenwegen, P. (2023, September). Grasp solution approach for the e-waste collection problem. In *International Conference on Computational Logistics* (pp. 260-275). Cham: Springer Nature Switzerland.

Gunawan, A., Nguyen, M. P. K., Vincent, F. Y., & **Nguyen, D. V. A.** (2023, August). The heterogeneous vehicle routing problem with multiple time windows for the e-waste collection problem. In *2023 IEEE 19th International Conference on Automation Science and Engineering (CASE)* (pp. 1-6). IEEE.

Presentations

Nguyen, D. V. A., Flensburg, J. V., Cerreto, F., Pascariu, B., Pellegrini, P., Azevedo, C. L., & Rodrigues, F. (2025) Large-scale demand prediction in urban rail using multi-graph inductive representation learning. *104th Annual Meeting of the Transportation Research Board (TRB)*, 2025. Lectern Session: Emerging Behaviors of Urban Rail Transit Passengers - A Global Scan.

Nguyen, D. V. A., R. Piplani, A. Gunawan. GRASP reinforced by Evolutionary Path-relinking for two-echelon covering tour vehicle routing problem. *33rd European Conference on Operational Research (EURO)*, 2024.

Gunawan, A., Nguyen, **D. V. A.,** Nguyen, P. K. M., & Vansteenwegen, P. (2023). GRASP based metaheuristic to solve the mixed fleet e-waste collection route planning problem. *17th International Congress on Logistics and SCM Systems*, 2023.

Thesis

Nguyen, D. V. A., (2022). Two-echelon vehicle routing problem for post-disaster aid. *Nanyang Technological University.*

Teaching and Mentoring

Teaching Assistant – *42101 Introduction to Operations Research*, Spring 2024, Technical University of Denmark (DTU).

Teaching Assistant – *42578 Advanced Business Analytics*, Spring 2024 & Spring 2025, Technical University of Denmark (DTU).

Teaching Assistant – *42577 Introduction to Business Analytics*, Autumn 2024 & Autumn 2025, Technical University of Denmark (DTU).

Co-supervisor – MSc Thesis: Damien Fleutry. MSc in Transport and Logistics, Spring 2024. Thesis: *Deep Reinforcement Learning for Traffic Signal Control: Adapting the framework for SimMobility.*

Co-supervisor – MSc Thesis: Alma Fazlagic & Kristine Pryds Loft. MSc in Business Analytics, Spring 2025. Thesis: *Forecasting Reconciliation with Origin-Destination Models Using Graph Neural Networks.*

Evaluator Roles

Evaluator for the ELLIS PhD Program – European Laboratory for Learning and Intelligent Systems (2024)

Reviewer for Academic Journals

Artificial Intelligence for Transportation (AIT), Elsevier

Engineering Applications of Artificial Intelligence (EAAI), Elservier

European Journal of Operational Research (EJOR), Elsevier

Transportation Research Part C: Emerging Technologies (TRC), Elsevier

Transportation Research Part E: Logistics and Transportation Review (TRE), Elsevier

Reviewer for Scientific Conferences

Transportation Research Board (TRB) Annual Meeting - 2025

The Conference on Neural Information Processing Systems (NeurIPS) - 2025

The International Conference on Optimization, Modeling, Simulation, and Analytics - 2025

TRC-30: 30th Anniversary of Transportation Research Part C – 2024

Symposium of the European Association for Research in Transportation (hEART) – 2024

Professional Memberships

Sep 2025 – Present	IEEE Robotics and Automation Society (IEEE-RAS)
Sep 2025 – Present	IEEE Intelligent Transportation Systems Society (IEEE-ITSS)
Sep 2025 – Present	IEEE Control Systems Society (IEEE-CSS)
Sep 2025 – Present	European Complex Systems Society (ECSS)
Sep 2025 – Present	The Institute of Electrical and Electronics Engineers (IEEE)
Jun 2023 – Present	INFORMS – The Institute for Operations Research and the Management Sciences
Jun 2023 – Present	SIAM – Society for Industrial and Applied Mathematics
May 2023 – Present	ACM – Association for Computing Machinery

References

Assoc. Prof. Filipe Rodrigues
Email: rodr@dtu.dk
Relationship: PhD Supervisor

Assoc. Prof. Carlos Lima Azevedo
Email: climaz@dtu.dk
Relationship: PhD Co-supervisor