



UNIVERSITY OF MINNESOTA

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## Open Funded PhD Position in AI for Transportation (2024 Fall)

### Position Description

Dr. Seongjin Choi's research group is looking for 1-2 highly motivated Ph.D. students for Fall 2024 (or Spring 2025). The positions are in the Department of Civil, Environmental, and Geo-Engineering at the University of Minnesota, Twin Cities. Those with a passion for applying machine learning and deep learning to urban transportation and mobility data and utilizing advanced AI methods to solve transportation and mobility problems, are highly encouraged to apply.

Areas of research interest, though not limited to, are:

- Urban transportation and mobility data analytics
- Generative AI for transportation and mobility data
- Spatiotemporal data modeling (forecasting, imputation)
- Modeling CAV, C-ITS using Reinforcement Learning
- Other applications of machine learning and deep learning in the transportation domain

Preferred candidates should have strong quantitative and modeling skills, and excellent communication skills. They should be interested in using data-driven, AI methodologies for extensive data analysis and AI/deep learning model development. A strong background in mathematics, machine learning, and computer programming (Python, C++) is highly recommended.

**Successful candidates will be fully funded in various ways including Research Assistantship and Teaching Assistantship, which generally includes stipend, full tuition, and health insurance.**

### How to apply

If you're interested, please send me an email at [chois@umn.edu](mailto:chois@umn.edu) by April 5th. Please include a **CV**, a **research statement**, and an **academic transcript**. Please use "Prospective PhD student [Your name]" as your email subject.

See more information from [How to Apply to CEGE Graduate Programs](#) and [Financial Support](#)

### About the University of Minnesota, Twin Cities

The University of Minnesota, Twin Cities (UMTC), is among the largest public research universities in the United States, offering undergraduate, graduate, and professional students a multitude of opportunities for study and research. The Department of Civil, Environmental, and Geo- Engineering (CEGE) at the University of Minnesota features state-of-the-art facilities, including the Minnesota Traffic Observatory (MTO) and the Minnesota Supercomputing Institute. MTO is a transportation laboratory focusing on the testing and evaluation of new transportation management and operational strategies and traveler information technologies. CECE is one of twelve departments within the College of Science and Engineering, which offers outstanding opportunities for interdisciplinary research due to the unique combination of mathematics, physical sciences, and engineering in one college.

### About Dr. Seongjin Choi

Dr. Seongjin Choi is an Assistant Professor in the Department of Civil, Environmental, and Geo- Engineering at the University of Minnesota, Twin Cities. Dr. Choi received his Ph.D., M.S., and B.S. degrees from Korea Advanced Institute of Science and Technology at the Department of Civil and Environmental Engineering in 2021, 2017, and 2015, respectively. Prior to joining the University of Minnesota, he was a postdoctoral researcher at McGill University.

See more details about Dr. Seongjin Choi at:

- Website: <https://choi-seongjin.github.io/>
- Research Seminar: [https://youtu.be/LR2QA3gU\\_Eg?si=ozQvO3tz2xSBd\\_04](https://youtu.be/LR2QA3gU_Eg?si=ozQvO3tz2xSBd_04)