



AGILE PhD School 2024

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Geoinformation Group



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Background Information

- ❑ National Technical University of Athens (NTUA) in 2022
Department of Rural Surveying and Geoinformatics Engineering



- ❑ Started PhD in 2023 in TU Wien
Research Group Geoinformation



- ❑ Research Interest:
 - ✓ Urban Mobility
 - ✓ Transportation Network
 - ✓ Modes of Transportation
 - ✓ Routing Algorithms
 - ✓ ...

My Research

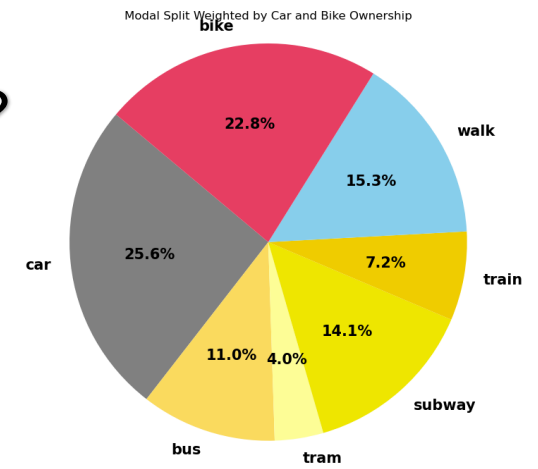
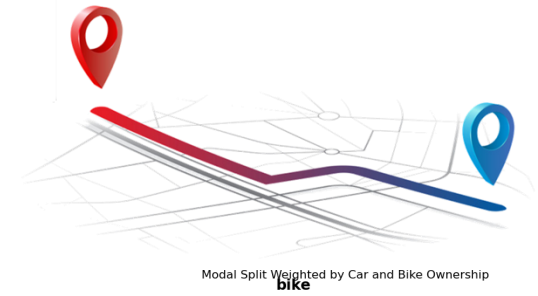
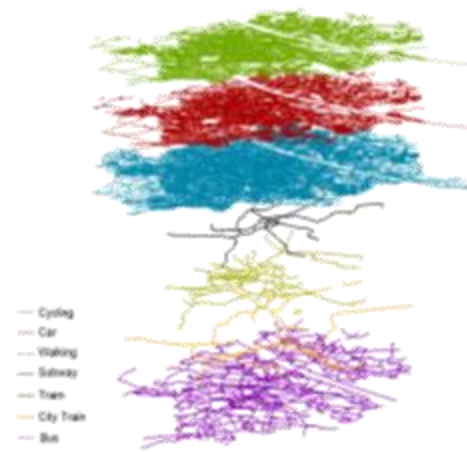
"What changes can be made to the transportation network infrastructure to improve the use of public transport and active mobility modes?"

- geospatial analysis perspective*
- focusing on how the transportation network's structure can be optimized*
- improve mobility routes and encourage greater use of public transportation and active modes of transport*

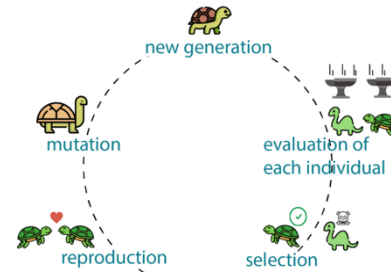


Methodology

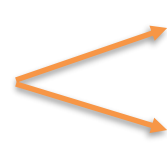
- ❑ *Multi-Modal Graph Structure of a City*
- ❑ *Select Origin and Destination Pairs*
- ❑ *Apply Modified Routing Algorithm*
- ❑ *Which modes of transportation were used in the routes?*
- ❑ *Observe Network Characteristics*



How can we encourage eco-friendly modalities?

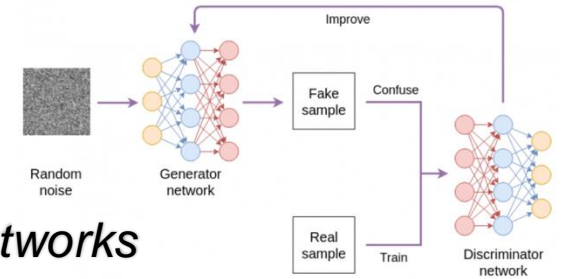


❑ *Use Advanced Technologies*



Genetic Algorithms

Generative Adversarial Networks



❑ *Apply and suggest changes in the infrastructure*



Encourage Eco-Friendly Transportation



Thank you !

Gogousou Ioanna