

SABA SABET

Ph.D. Candidate

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in Saba Sabet

EXPERIENCE

Research Assistant in Tehran's Dynamic O-D Matrix Project

Dr. Mahmoud Mesbah

May 2020 - Mar 2021 Tehran, Iran

- Prepared data and information for making regular report data analysis on historical flow and speed data
- Performed data analysis for complex data and files using SPSS and proposed a methodology of automated data cleaning for data derived from loop detectors and traffic cameras
- Performed data cleaning, mining and visualization using Python

Teaching Assistant

Department of Civil Engineering, Amirkabir University of Technology

Sep 2020 - Feb 2021 Tehran, Iran

- M.Sc. Course: "Advanced Probability and Statistics"

Teaching Assistant

Department of Civil Engineering, Sharif University of Technology

Sep 2020 - Feb 2021 Tehran, Iran

- M.Sc. Course: "Traffic Flow Theory and Modeling"

Data Analyst

Avina ITS Corporation

Dec 2019 - Mar 2020 Tehran, Iran

- Performed statistical data analysis
- Displayed data analysis in regular meetings in a comparative form with other relevant studies

HONORS AND ACHIEVEMENTS

Ranked among top 3 postgraduate students of Road and Transportation Engineering, Sharif University of Technology, Iran

Ranked among top 0.3% in Nation-Wide University Entrance Exam of Civil Engineering

Ranked among top 0.2% in Nation-Wide University Entrance Exam in Mathematics and Physics

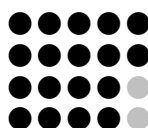
RESEARCH INTERESTS

Traffic Flow Theory and Modeling

Smart Grid/ Electric Vehicles

Connected and Autonomous Vehicles

Artificial Neural Networks/Deep Learning



EDUCATION

M.Sc. Transportation Engineering - 3.54/4 GPA

Sharif University of Technology

Sep 2018 - Oct 2020

B.Sc. Civil Engineering - 3.38/4 GPA

Amirkabir University of Technology

Sep 2016 - Sep 2018

High School Diploma Mathematics - 4/4 GPA

National Organization Development of Exceptional Talents

Sep 2010 - Sep 2014

SELECTED PROJECTS

Short-Term Traffic State Prediction via Macroscopic Fundamental Diagram in an Urban Network

- Prepared data and information about inflow, outflow and average speed of Tehran's CBD
- Performed data analysis and preparation for the big data (containing 12 months of data for about 400 traffic cameras and temperature and precipitation data), using SPSS
- Performed data cleaning and predicted the inflow and outflow rate and average speed via SARIMAX, MLP, and LSTM models using Python
- Predicted the MFD of Tehran's CBD network using flow and speed predictions
- Provided Speed-Flow and Flow-Density curves for traffic prediction of the network

Travel Time and Average Speed Comparison Between Selected Cities Around the World

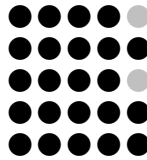
- Proposed a methodology to compare travel measures such as travel time and average speed among different cities using the data derived from Google Maps Distance Matrix API and Simulation

Signal Coordination for an Arterial's Intersections

- Had to model and coordinate the traffic signals of Azadi Avenue with both Synchro and Vissim.

LANGUAGES AND SKILLS

Python
Microsoft Office Package, \LaTeX
SPSS
Arc GIS, Aimsun, Synchro, Vissim, Civil 3D
Farsi, English



KEY STRENGTHS

Multitasking Perseverance & Hard work

Teamwork & Effective Communication

Language Proficiency Deep Passion for Research

Analytical Skills

JOURNAL PUBLICATIONS

A Cost-Effective Methodology to Compare Travel Time and Speed: A Tale of Eleven Cities

Sabet.S., Namdarpour.F. and Mesbah.M. *In Proceedings of the Institution of Civil Engineers-Municipal Engineer (pp. 1-24). Thomas Telford Ltd.*

Short-Term Traffic State Prediction via Macroscopic Fundamental Diagram in an Urban Network

Sabet.S., Nassiri.H *Under revision in Hindawi journal of Advanced Transportation*

REFEREES

Dr. Habibollah Nassiri

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☑ Associate Professor at Sharif University of Technology,
Head of Transportation Engineering Planning Division

Dr. Mahmoud Mesbah

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☑ Assistant Professor at Amirkabir University of Technology and Senior Lecturer at the School of Civil Engineering, The University of Queensland

Dr. Amir Golroo

@ agolroo@aut.ac.ir

☑ Assistant Professor and Director of Scientific and International Cooperation at Amirkabir University of Technology