

# Tara Radvand

## Curriculum Vitae

+1 (765) 714 9792  
tradvand@purdue.edu

### Education

- 2021–present **Ph.D. in Transportation Engineering**,  
University of Michigan, Ann Arbor.
  - Current cumulative GPA : 4.0/4.0
- 2019–2020 **MSc in Transportation Engineering**,  
Purdue University, West Lafayette.
  - Cumulative GPA : 4.0/4.0
- 2014–2019 **B.Sc. in Civil Engineering**,  
Sharif University of Technology.

### Honors and Awards

- 2021 **Henry E. Riggs Fellowship**, CEE department, University of Michigan, Ann Arbor.
- 2013 **Bronze Medal**, in 9<sup>th</sup> National Astronomy and Astrophysics Olympiad.
- 2010 **Selected for study in schools of National Organization for Development of Exceptional Talents (NODET)** through an exam with less than 1% acceptance rate.

### Research Interests

Traffic Flow Theory.  
Control and Analysis of Dynamic Systems.  
Network Modeling.  
Parking Management.  
Next Generation of Transportation Systems.

### Publications

**Radvand, T.**, Bahrami, S., Yin, Y., Laberteaux, K., *Dynamic Parking Management For Automated Vehicles In Downtown Areas*, In preparation for submission.

**Radvand, T.**, Chen, Z., Labi, S., *Cost-competitiveness Analysis of Power Banks for Electric Vehicles*, In preparation for submission.

**Radvand, T.**, Toufigh, V., *Properties of concrete containing Guar gum*, European Journal of Environmental and Civil Engineering, 2020.

### Presentation

- Oral Presentations:
  - Dynamic Parking Management For Automated Vehicles In Downtown Areas**, INFORMS Annual Meeting - 2021.

**Deploying Power Bank Stations: The Bright Future Of Electric Vehicle Adoption,**  
INFORMS Annual Meeting - 2020.

**Electric Charging Infrastructure Deployment the Past the Present and the Future,**  
INFORMS Annual Meeting - 2019.

○ Poster Presentation:

- **Dynamic Parking Management For Automated Vehicles In Downtown Areas,** Transportation Research Board - 2022, Accepted for Presentation.
- **Safety, Mobility, and Cost Benefits of Closing One Direction of Interstate in rural Areas During Construction Work,** JTRP Poster Session - 2020.
- **Deploying Battery Swapping Stations: The Bright Future of Electric Vehicles Adaption,** ASCE - 2020.

## Relevant Courses

**Graduate Courses at the University of Michigan:** *Transportation Network Modelling, Traffic Science, Transportation System Optimization, Data Mining in Transportation, Microeconomics II, Nonlinear Programming.*

**Graduate Courses at Purdue University:** *Congestion Pricing, Linear Programming, Stochastic Models in Operations Research I, Multi Objective Optimization, Microeconomics I.*

**Courses from Coursera:** *Electric Vehicles and Mobility.*

**Courses at Sharif University of Technology:** *System Engineering, Engineering Economy, Statistics and Probability, Numerical Analysis, Traffic and Highway Engineering.*

## Software Skills

**Programming:** *Python, Matlab, C++.*

**Optimization:** *Cplex, Gurobi, Pyomo, AMPL, GAMS.*

**Data Analysis:** *R.*

## Teaching Experiences

2018-2019 **Teaching Assistant for Traffic & Highway Engineering,** Sharif University of Technology.

2017-2018 **Teaching Assistant for Concrete Technology,** Sharif University of Technology.

2016-2018 **Teaching Astrophysics,**  
*Teaching Astrophysics to high school students who wanted to prepare for National Astronomy and Astrophysics Olympiad.*

## Professional Activities

**Co-chair in the International Symposium of Transportation Data and Modelling (ISTDM 2021).**

**Secretary of the Institute of Transportation Engineers, Purdue University.**

**Reviewer for TRB'20 and ICEEEE'19.**

**Member of Women Transportation Society (WTS).**