# Mahmoud Pourmehrab

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Objective: Internship

#### **EDUCATION BACKGROUND**

Doctor of Philosophy, Transportation Planning and Engineering, GPA 3.94

Aug 2015 – Aug 2019

University of Florida, Gainesville

Master of Science, Transportation Planning and Engineering, GPA 4.0

Aug 2012 - Aug 2014

Sharif University of Technology, Tehran

Bachelor of Science, Civil Engineering, GPA 4.0

Aug 2008 – Aug 2012

Sharif University of Technology, Tehran

#### **EXPERIENCE**

#### Research Assistant

Traffic Signal Control with Connected and Autonomous Vehicles in the Traffic Stream

Aug 2015 - Aug 2017

(at University of Florida, National Science Foundation Funded)

- Modeling a mathematical program to optimize an isolated signalized intersection under high demand of automated and conventional vehicles.
- Developing an efficient solution method on real-time basis.
- Coding the entire process in Python programming language.
- Analyzing, and visualizing the conduct simulation experiments' results.
- Writing official scripts including deliverables, reports, and research papers in a well-organizes manner.

### Development and testing of Intelligent Intersection Control System

Aug 2015 - Aug 2016

(at University of Florida, Florida Department of Transportation Funded)

- Developing a modeling framework to integrate the automated vehicles with isolated signalized intersections.
- Devising a solution algorithm to jointly optimize signalization and trajectory of automated vehicles under medium level flowrates.
- Coding and testing the algorithm in MATLAB programming language.
- Acquiring variety of skills including advanced programming, version controlling, statistical analyzing, data visualizing, and presenting in a punctual fashion respecting the project's needs.

Congestion Pricing Models in Urban Networks (coding optimization algorithms in Python)

Aug 2012 - Aug 2015

(at Sharif University of Technology, Tehran)

#### **INTERNSHIP**

Worked as an assistant structural engineer to design a 12-floor concrete structure (KUSHAK Engineering Co., Tehran)

Summer 2012

- Modeling and testing the structure for variety of loadings in ETABS software.

#### **AFFILATIONS**

- Attended Florida Automated Vehicles (FAV), 2015 & 2016
- Event Coordinator of ITE Chapter 2017-2018, University of Florida
- Member of Women's Transportation Seminar (WTS), University of Florida

**SKILLS** 

Programming: Python, MATLAB, LaTex, Mathematica

Transportation: VISSIM

Data analyze: R Language, Python, Tableau, Stata, SPSS

Optimization: GAMS, CPLEX, NEOS

## REFERENCES:

# Lily Elefteriadou

Relation: (chief supervisor, professor)

Designation: Professor University of Florida Ph No: 352 392-9537 Email: elefter@ce.ufl.edu

# Yafeng Yin

Relation: (committee member, professor)

Designation: Professor University of Florida

Ph No: 352 392-9537 x1455 Email: yafeng@ce.ufl.edu

## Siva Srinivasan

Relation: (committee member, professor)

Designation: Professor University of Florida Ph No: 352 392-9537 Email: siva@ce.ufl.edu