# MINOO TAGHAVI

#### Data Scientist & Transportation Engineer

**Q** Washington, DC.

(202) 604-1905.

Portfolio

Minoo.tgh1991@gmail.com

(m) /minootaghavi

(C) /Github- minoot7

#### **ABOUT ME**

Data Scientist and Transportation Engineer with machine learning, deep learning algorithms, and analysis of large-scale datasets. Seeking to leverage my engineering expertise, programming and data analysis skills in data science field.

#### **SKILLS**

Python ArcGIS- ArcMap
SQL Roadware Vision
Machine Learning MicroStation
Microsoft Excel/Access Tableau
AutoCAD R programming

#### **EXPERIENCE**

# Data Science Fellow- General Assembly, Washington DC

AUG 2020- DEC 2020

- Completed 30+ projects and labs utilizing the entire data science workflow, including data acquisition, data cleaning, data visualization, exploratory analysis, feature selection, modeling, and evaluation.
- Conducted natural language processing (using NLTK library in Python) on thousands of scraped Reddit posts to train several classification models to predict related subreddit.
- Built geospatial analysis of areas at risk for COVID-19 and natural disasters in California using python (Clustering algorithm) and ArcGIS and Tableau.
- Developed Lane detection with deep learning (CNN architecture) with 88% accuracy on test data set using transfer learning and Pytorch library.

# Transportation Engineer- Applied Research Associates Inc.,

JUL 2018- Present

# for Maryland Department of Transportation, State Highway Administration

- Developed and improved data quality management protocols and procedures saving hundreds of man-hours.
- Worked on pavement network data analysis, reporting, and mapping (SQL, Excel, ArcGIS).
- Developed performance metric evaluation of MDOT SHA roadways using pavement condition and construction history data.

#### PhD Graduate Research Assistant- University of Maryland, College Park JAN 2018- JUL 2018

• Studied transportation systems and conducted traffic modeling projects such as modeling traffic flow using PTV Vissim for prediction and improvement of traffic flow.

# Project Engineer- Milani Construction LLC, Washington DC

JAN 2017- JAN 2018

- Prepared cost estimates for asphalt pavement and bridge construction projects.
- Participated in construction bidding process, CPM scheduling, takeoffs and estimates.

#### Transportation Engineer- EBA Eng. Inc. - Consultant of MDOT- SHA

JUN 2016- JAN 2017

- Prepared RFIs, material clearance, change orders and progress report.
- Worked on MCMS/MMS programs to manage cost/expense for labors and equipment.

## Project Manager Assistant Intern - PWE, City of Houston, Texas

APR 2015- APR 2016

- Worked on cost estimation and scheduling and reviewed field material orders.
- Assisted in inspection and project management of waterline and traffic signalization.

#### **EDUCATION**

#### 2014 - 2016 • University of Houston

M.Sc. in Construction Engineering & Management

## 2009 - 2014 • Ferdowsi University of Mashhad

B.Sc. in Architectural Engineering

## **CERTIFICATION**

- Data Science Immersive Certification Completed 480 hours
- ArcGIS Training Certification
- OSHA Construction