## MINOO TAGHAVI

## Data Scientist & Transportation Engineer

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## **ABOUT ME**

Data Scientist and Transportation Engineer with 5 years of experience in the transportation industry, machine learning techniques, deep learning algorithms, and large-scale datasets. Seeking to leverage my engineering expertise, programming and data analysis skills in data science field.

## **SKILLS**

Data Science: Machine Learning, deep Learning, Natural language Processing, Web Scraping, Time Series Analysis, Image Classification, Data Modeling, HTML/ CSS

Programming: Python, TensorFlow, Scala, HTML, R Programming, MATLAB, SQL, Spark, AWS

Data Visualization: Tableau, Matplotlib, Seaborn, ArcGIS/ArcMap

## **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., for Maryland Department of Transportation, State Highway Administration

JUL 2018- PRESENT

- 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- 480 hrs
- ArcGIS Training Certification
- OSHA Construction