

# MINOO TAGHAVI

## Data Scientist & Staff Engineer

📍 Washington, DC.  
✉ [Minoo.tgh1991@gmail.com](mailto:Minoo.tgh1991@gmail.com)

☎ (202) 604-1905  
🌐 [linkedin.com/in/minootaghavi/](https://www.linkedin.com/in/minootaghavi/)

📄 [minoot7.github.io/MinooTaghavi](https://minoot7.github.io/MinooTaghavi)  
🐙 [github.com/minoot7](https://github.com/minoot7)

## ABOUT ME

Data Scientist and 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 and machine learning techniques (Clustering algorithm) and ArcGIS and Tableau.
- Developed a housing market price model with 94% accuracy using several linear machine learning techniques to predict the sale price of hundreds of houses based on a comprehensive set of features.
- Developed lane detection with deep learning (CNN architecture) with 88% accuracy on test data set using transfer learning and Pytorch library.

### Staff Engineer- Applied Research Associates Inc.,

JUL 2018- PRESENT

#### On-site Consultant for Maryland Department of Transportation, State Highway Administration

- Addressed customers' (divisions, districts and public) ad hoc requests including pavement network data inquiries.
- 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.

### 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