# **Ebrahim Tarshizi**

San Diego, CA - Email me on Indeed: indeed.com/r/Ebrahim-Tarshizi/3b83d2e6a53d207e

A motivated data scientist with hands-on experience in data mining, predictive analytics, optimization and visualization, with solid knowledge in applied statistics and machine learning, and cross-disciplinary engineering background.

#### WORK EXPERIENCE

Predictive Analytics of Boston Housing Prices Data - September 2016 to March 2017

Built & compared various predictive analytics, including linear models (Linear Regression, Robust Linear Regression with PCA, PLS, Ridge Regression, Lasso Regression, and Elastic net) and non-linear models (Neural Network, MARS, SVM, and kNN) in R

Machine Learning Algorithms and Challenges

- Developed an algorithm for Kernel Logistic Regression & built k-Nearest Neighbor (kNN) classifier
- Applied Naive Bayes classifier for text categorizations in MATLAB

Time Series and Forecasting Project

• Conducted time series analysis of annual copper prices from 1800 to 1997, including model specification, model fitting, forecasting, and validation

U.S. government - April 2016 to July 2016

Analyzing & Predicting Wildfires in the San Diego County Using Various Machine Learning Algorithms

- Integrating complex data from different sources and creating ensemble, SVM & ANN models using Python Applied Data Mining and Statistical Learning Methods for Government Accident Injuries Data
- Performing data wrangling, including exploratory analysis, data cleaning & feature selection, pre-processing, and predictive analytics by applying data mining techniques and supervised & unsupervised machine learning algorithms using R on U.S. government datasets

Text Mining and Analysis of US Department of Labor's MSHA Fatal Accident Reports

• Conducted this project to discover and understand the patterns of data in annual mine disaster reports and visualize technical results, including correlation plots and word clouds using R text mining packages

Time Series Analysis & Statistical Visualizations of Fatalities & Citations in Sand & Gravel Mines in USA

Carried out time series analysis & developed interactive analytics visualizations of fatalities and citations

Interactive Map Visualization and Real-time Analysis of Mine Disasters in the U.S. Mining Industry

Created an interactive dashboard and visual analytics of disasters (1839-2010) in R with Shiny & Tableau

#### Data Scientist / Visiting Scholar

San Diego Supercomputer Center - January 2010 to December 2011

UC San Diego

Full Member, Institute of Computing and Cybersystems (ICC), Center for Data Sciences, MTU Assistant Professor, Department of Geological & Mining Engineering & Sciences, MTU Graduate Research Assistant, Mine Systems Optimization and Simulation Laboratory, UNR Graduate Teaching Assistant, University of Nevada, Reno, UNR

Selected Data Science Projects & Experience:

June 17-Present

June 17-Present

Jan 17-May 17

Aug 16-Feb 17

### **EDUCATION**

# **MBA** in Interdisciplinary Program

College of Business, University of Nevada, Reno 2000 to 2004

# MSc in Geo-Engineering in Engineering

University of Nevada - Reno, NV

# **BSc in Exploration Engineering**

Faculty of Engineering, Azad University, Mahallat

#### **SKILLS**

BI (Less than 1 year), BUSINESS INTELLIGENCE (Less than 1 year), Linux (Less than 1 year), Power BI (Less than 1 year), SQL (Less than 1 year)

## ADDITIONAL INFORMATION

Technical Skills:

R/R Studio, Python/Spyder, Tableau, Power BI, GPSS\H, Qlik, SQL (basic), UNIX and Linux