Saeb Ragani Lamooki

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Linkedin Github Portfolio

Objective

Seeking Internship in Machine Learning and Data Science for the Summer of 2021.

Skills

- **Machine Learning, Deep Learning, Data Mining**
- **Statistical Analysis, Statistical Process Control**
- **Signal Processing, Time Series Analysis**
- Programming Languages: **Python, R, Matlab, Fortran**

Education

Ph.D. Candidate | ***Mechanical Engineering*** *Fall 2016 - present*
SUNY at Buffalo Buffalo, NY

Master of Science | ***Mechanical Engineering*** *2012 - 2014*
Eastern Mediterranean University Magusa, Turkey

Bachelor of Science | ***Mechanical Engineering*** *2005 to 2010*
K.N. Toosi University of Technology Tehran, Iran

Work Experience

CFD Engineer *Sep 2014 - Jan 2016*
Med-X Research Institute Shanghai, China

Projects and Research

Activity Recognition for Electric Line Workers from Single Wrist Sensor | ***Python*** Spring 2021
Scikit-learn: *k*-NN, SVM, Random Forest — TensorFlow: RNN, LSTM

Gait Analysis from IMU Signals using Statistical Process Control Techniques | ***R*** Summer 2019
Hotelling's T^2 & EWMA charts

Shoulder and Back Posture Analysis from IMU and Motion Capture Data | ***Matlab*** Ongoing
University at Buffalo

Sentiment Analysis on Movie Reviews: Neural Networks and Rule-based | ***Python*** Spring 2020
TensorFlow: Multi Layer Perceptron

Assess 5 Post-processing Measures to Improve Fairness in COMPAS ML Alg. | ***Python*** Spring 2020
Maximum Profit/Accuracy, Single Threshold, Predictive Parity, Demographic Parity, Equal Opportunity

Programming 5 Clustering & 4 Classification Algorithms Without using Libraries | ***Python*** Fall 2019
Clustering: K-means, Hierarchical, Density-based, Mixture Model, Spectral
Classifictaion: *k*-NN, Decision Tree, Naive Bayes, Random Forest

Selected Publications (Google Scholar)

A Personalized and Non-parametric Framework for Detecting Changes in Gait Cycles 2020
Submitted to the Scientific Reports Journal

Activity Recognition in Electric Line workers from a Single Wrist-Worn Accelerometer 2021
Submitted to the Institute of Industrial and Systems Engineers Journal

Teaching Experience

Dynamics Systems Lab (2 semesters), Thermodynamics (4 semesters)
University at Buffalo Buffalo, NY