Ali Hassanzadeh Naeini, Ph.D. Candidate

Email: ahassanzadeh@ucmerced.edu
Cell Phone:(209)761-3345 **Address**: San Francisco, California, USA
Linkedin: www.linkedin.com/in/ali-hassanzadeh-naeini/ **Github**: github.com/ahassanzadeh

Machine Learning Engineer

- **4+ years** of experience in team management and working on **large datasets** using AWS.
- Published 25 times cited journal papers in **experimental testing and data analytic** .
- Strong programming with **Fortran, Matlab and Python**
- Skilled on working with libraries such as **Tensorflow, Pandas, Numpy, Scikit-Learn**

Selected Courses

Machine Learning, Structuring Machine Learning Projects, Neural Networks and Deep Learning, Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization, Sequence Models, Convolutional Neural Networks, Introduction to computer science, Algorithm Design and Analysis.

Professional Experience

Artificial Intelligence Fellow, *Insight Data Science, San Francisco, CA, United State* Sep 19 - Present

- **NIPS Animal-AI Competition**: Worked on a consulting project for In-Q-Tel Lab 41 to use Reinforcement learning to train an agent that can learn animals' skills such as food retrieval in a simulated environment(Unity).
- This approach has potential be applied to train control system of a **animal-like robot** such as recuse dogs.

Graduate Research Assistant, *University of California, Merced, CA, United state* Aug 15 - Present

1- Personal projects:

- **Purchasing time and value prediction using Time series**
  - **Purpose**: Accurate prediction of companies' financial growth based on customers transaction helps a money management incorporation to predict quarterly earnings accurately for investors and shareholders.
  - **Dataset**: it is obtained from a money management company in San Francisco for 375k current customers.
  - **Outcome 1**: The frequency of the customers transactions for each customer evaluated separately and transaction dates are forcasted. **The accuracy of the algorithm with xgboost is 75%**.
  - **Outcome 2**: The transactions' value are predicted using **LSTM** with **80% accuracy**.

2- Project Leader in Federal/State engineering projects:

- **California Energy Commission(CEC) project:**
  - National Renewable Energy Lab(NREL) dataset for past 10 years is used to forecast the solar irradiation in California for 2018 with 80% accuracy via **Gradient Boosted Regressor(GBR).**
- **Department of Energy(DOE) project :**
  - Using machine learning to forecast the electrical, thermal efficiency and durability of a novel solar collector for next 20 years using the DOE dataset of solar collectors for the the past 30 years.

Education

Ph.D.,Environmental Eng., University of California, Merced, California Present
Research area: Enhance electrical efficiency of semiconductors using novel heats sinks such as heatpipes.
Ms.c, Mechanical Eng., Sharif University of Technology, Tehran, Iran June 2015
Research area: Computational Fluid Dynamic and Modeling of energy system.
B.Sc, Mechanical Eng., Azad University, Mashhad, Iran, July 2013
Research area: Design a conventional control system for Rescue Robots.