SINA TAYEBATI

Chicago, IL

in Sina Tayebati

Repositories

4 +1 (708) 733-9977

WORK EXPERIENCE

R&D Engineer

SUNSTAR Inc.

Aug 2022 - Present

♀ IL, U.S.

- Developing a framework with various data manipulation and machine learning tools for studying and understanding the complex correlations between product characteristic and in vitro/vivo data.
- Developing deep learning based oral hygiene monitoring model.
- Work with cross-sectional teams to launch a software integrated with the smart brushes to track, store, and analyze the data related to the consumer's behavior in oral care.

AI & Advance Technologies Engineer TRUMPF Inc.

♀ IL. U.S.

- Developed scalable, efficient, and customized machine learning models for real-time analytic, process optimization, and reducing system's variability in manufacturing 4.0..
- Contributed in developing a comprehensive framework of high-quality, and explainable shallow, deep, and pretrained ML models for tackling diverse challenges in autonomous manufacturing with focus on automating the workflows for end user at scale.
- Built predictive models using various machine learning tools to predict anomalies and potential system failures.

Research Intern

TRUMPF Inc.

May 2021 - Aug 2021

♀ IL, U.S.

- Developed proof-of-concept hybrid CNN-LSTM machine learning model for online monitoring in laser technologies.
- Developed proof-of-concept unsupervised models for tech instrument performance prediction and optimization.

Research Assistant (Idaho National Lab) **Northern Illinois University**

♀ IL, U.S.

• Developed a comprehensive physics aware machine learning framework for practical prediction and optimization applications in smart & autonamous manufacturing.

SIDE PROJECTS

- Built sentiment analysis model using BERT and multilingual transformers on Farsi Text to classify review comments about books.
- Collaborated in building a machine learning framework using the historical data collected at TRUMPF Smart Factory for predictive maintenance, detecting anomalies, and forecasting patterns in the data to recommend essential process improvements.

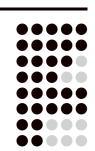
PROGRAMMING SKILLS

Pvthon SQL HTML/CSS



FRAMEWORKS

Keras/TensorFlow Scikit-learn **PyTorch** Spark Numpy **Pandas PvRo** Bootstrap/React



TECHNICAL SKILLS

Data Structure & Algorithms

Machine/Deep Learning

Object Oriented Programming

Git Version Control | Web Development

Distributed Computing

EDUCATION

M.S. Mechanical Engineering **Northern Illinois University**

IL, U.S., 2020 - 2021

Advisor: Dr. Kyu Taek Cho

B.Sc. in Mechanical Engineering **University of Kashan**

2014 - 2018

PUBLICATIONS

• A hybrid machine learning framework for clad characteristics prediction in Metal Additive Manufacturing (under review).

VOLUNTEERING

Board Member & Website Admin Chicago4Iran Org.

· Responsible for building, launching, and maintaining the NGO's website: [https://www.chicago4iran.org/]

CERTIFICATES

Back-End Development

Meta

Mov 2023

Machine Learning Data Lifecycle in Production DeepLearning.Al

Machine Learning in Production

DeepLearning.AI

Generative Deep Learning with TensorFlow DeepLearning.AI

Advanced Machine Learning with TensorFlow on Google Cloud Platform

Google

Mov 2020

- Production Machine Learning Systems
- End-to-End Machine Learning with TensorFlow on GCP
- Image Understanding with TensorFlow on GCP
- Sequence Models for Time Series and Natural Language Processing
- · Recommendation Systems with TensorFlow on GCP

DeepLearning.AI TensorFlow Developer

DeepLearning.AI

Aug 2020

- Introduction to TensorFlow for Artificial Intelligence, Machine Learning and Deep Learning
- Convolutional Neural Networks in TensorFlow
- Natural Language Processing in TnensorFlow
- Sequences, Time Series and Prediction

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization

DeepLearning.AI

Aug 2020

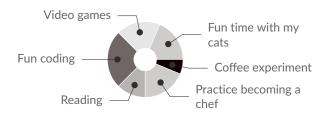
Sequences, Time Series and Prediction

DeepLearning.AI

Neural Networks and Deep Learning

DeepLearning.AI

HOBBIES



LANGUAGES

English Farsi



REFERENCES

Dr. Kyu Taek Cho, Associate Professor

- @ kcho@niu.edu
- Northern Illinois University

Dr. Christine Nguyen, Associate Professor

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- Northern Illinois University

Dr. Niechen Chen, Assistant Professor

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- Northern Illinois University

Dr. John Shelton, Assistant Professor

- @ jshelton4@niu.edu
- Northern Illinois University