## David Mosallanezhad

#### RESEARCH INTERESTS

My research interest mainly lies within machine learning, reinforcement learning and natural language processing algorithms and their applications.

#### **EDUCATION**

Arizona State University

Spring 2019 - 2023

PhD, Computer Science

Tempe, AZ

- **3.86/4.0** GPA
- Engineering Graduate Fellowship, offered in recognition of extraordinary academic achievements
- Funded by **DHS-CAOE**

Shiraz University

2015 - 2018

MSc, Computer Science, Artificial Intelligence

Shiraz, Iran

- **4.0/4.0** GPA
- Awarded as Best Graduate Student in Artificial Intelligence

Shiraz University 2011 - 2015

BSc, Computer Science, Software Engineering

Shiraz, Iran

- **3.83/4.0** GPA
- Awarded as Best Undergrad Student in Software Engineering

#### **WORK EXPERIENCE**

DHS-CAOE Aug 2019 – Present

Graduate Research Assistant

Tempe, AZ

- Working on a program to audit a machine learning model to analyze its fairness
- Researching on face matching task difficulties for both AI and human
- Creating and analyzing different face recognition models in terms of privacy and fairness
- Leading project on creating privacy-preserving image representations

DMML Lab Aug 2019 – Present

Graduate Research Assistant

Tempe, AZ

- Leading a comprehensive survey on text generation and detecting machine-generated text
- Consultant for deep-fake and NLP related projects

Allen Institute for AI

Jul 2020 – Present

Volunteer Remote

IT Manager

- Volunteer for ParsiGLUE project, a suite of high-level NLP tasks for Persian language
- Currently working on query-query paraphrasing task: data annotation, and benchmark models

Shiraz University 2017

Setting up server farm for Deep Learning purposes and managing them

Shiraz, Iran

East Data Processing

**2016 – 2017** Tehran, Iran

Lead Python Programmer

- Leading a project to create hassle-free APIs for different websites
- Created a parallel program for executing user's commands to automate routine processes on different websites

Shiraz University 2015 – 2016

Web Developer Shiraz, Iran

One of creators of the Open-Source Electrophysiological Toolbox website

Shiraz University 2012

Undergrad Researcher Shiraz, Iran

Collected and researched important Android vulnerabilities and exploits

#### **TECHNICAL SKILLS**

**Skills:** Data analysis using Python, PyTorch, Tensorflow, Keras, Numpy, and Scikit – SQL – Web Servers **Experiences:** C++, C, and JAVA.

## **SELECTED PROJECTS**

## Implemented various Reinforcement Learning (RL) models on the Wumpus world

2020

- Final project of CSE 571 (Artificial Intelligence)
- Made the Wumpus World as a GYM environment available on PyPi

## Question answering using BERT

2019

Improved the base BERT model for question answering problem

## Stackoverflow question tag detection

2017

Designed different machine learning models to detect relevant tags based on a given question

## PUBLICATIONS (Google Scholar: <u>David Mos</u>allanezhad - Google Scholar)

# How Deferral Rate Can Affect Human Performance and Trust Perception? A Human-AI Joint Face-Detection Task

**IEA'21** 

Pouria Salehi, Erin Chiou, Michelle Mancenido, Ahmadreza Mosallanezhad, Aksheshkumar Shah, Myke Cohen

## Sentiment Analysis Using Syntactic Trees

under review

Mansooreh Karimi\*, Ahmadreza Mosallanezhad\*, Michelle Mancenido, Huan Liu

\* Equal contribution

## **Synthetic News Generation**

under review

Ahmadreza Mosallanezhad, Kai Shu, Huan Liu

## Domain Adaptive Fake News Detection

under review

Kai Shu\*, Ahmadreza Mosallanezhad\*, Steve Jadev, Michelle Mancenido, Huan Liu

\* Equal contribution

## Toward Privacy and Utility Preserving Image Representation

SBP-BRiMS'20

Ahmadreza Mosallanezhad, Yasin Silva, Michelle Mancenido, Huan Liu

Privacy-Aware Recommendation with Private-Attribute Protection using Adversarial Learning WSDM'20 Ghazaleh Beigi, Ahmadreza Mosallanezhad, R. Guo, H. Alvari, Alexander Nou, Huan Liu

Deep Reinforcement Learning-based Text Anonymization against Private-Attribute Inference EMNLP'19 Ahmadreza Mosallanezhad, Ghazaleh Beigi, Huan Liu

#### **PATENT**

## Deep Reinforcement Learning-based Text Anonymization against Private-Attribute Inference

pending

US patent application number: 63/114,285

## **EXTRACURRICULAR ACTIVITIES**

Program Committee (PC) member of IJCAI 2021 conference	2021
Program Committee (PC) member of NAACL-HLT 2021 conference	2021
Invited Reviewer for ACL 2021 conference	2021
Guest lecturer for Social Media Mining course	2020
Program Committee (PC) member of AAAI 2020	2020
Volunteer at ACL 2020 conference	2020
Reviewer at NeurIPS, ECML-PKDD, and ICWSM conferences	2020
Reviewer at SNAM, KAIS, and TWEB journals	2020
Winner of Sunhacks hackathon, 2 <sup>nd</sup> place	2019
Reviewer at KDD, SIGIR, and CIKM conferences	2019
Teaching Assistant for CSE 101, CSE 180, and CSE 205 courses	2019