AmirsinaTorfi

MACHINE LEARNING & DEEP LEARNING EXPERT

About
LinkedIn
GitHub
Twitter
Personal Page
Google Scholar

Contact
amirsina.torfi@gmail.com

Languages
Persian, English

Programming
Python, MATLAB,
JAVA, LATEX

Web
CSS3 & HTML5

Frameworks & Packages
Caffe, Tensorflow,
Theano, CNTK, keras,
OpenCV, Scikit-learn,
Pytorch

Operating Systems
Ubuntu, Windows, Mac

interests

Machine Learning, Deep Learning, Data Mining, Computer Vision, Natural Language Processing, Speech Recognition.

education

Since 2018	**Ph.D.** in Computer Science *Machine Learning, Deep Learning, Data Mining & NLP.*	Virginia Tech
2016–2017	**Ph.D.** in Electrical Engineering *Machine Learning & Computer Vision.*	West Virginia University
2015–2016	**Visiting student** in Electrical Engineering *Image Processing & Pattern Recognition.*	University of Maryland College Park
2015–2016	**Graduate Student** in Electrical Engineering *Machine Learning & Data Mining.*	Howard University
2011–2014	**Master of Science** in Information Technology *Information Theory & Communication.*	Iran Univ of Science & Technology
2006–2011	**Bachelor of Science** in Electrical Engineering *Communication Systems*	Iran Univ of Science & Technology

experience

2018 current	**Data Analytics Center, Virginia Tech** *-Using Deep Learning techniques for coding of civil unrest events*	Graduate Research Assistant
2016 2018	**Biometrics Center, West Virginia University** *-Using Deep Learning techniques for discriminant analysis and face verification* *- Implementing deep learning for speech recognition and sound verification using multi-modality.*	Graduate Research Assistant
2015 2016	**University of Maryland, College Park** *-Developing an open source software for QR Codes Pattern Recognition and Message Extraction* *-Successfully detect and reconstruct perfect QR-code pattern and then decode and extract the message and information within.*	Visiting Student

publications

- Amirsina **Torfi**, Seyed Mehdi Iranmanesh, Nasser Nasrabadi, and Jeremy Dawson. 3d convolutional neural networks for cross audio-visual matching recognition. *IEEE Access*, 5:22081–22091, 2017 (Link)
- Amirsina **Torfi**, Nasser M Nasrabadi, and Jeremy Dawson. Text-independent speaker verification using 3d convolutional neural networks. *arXiv preprint arXiv:1705.09422*, 2017 (Link)

- Xiaoxia Sun, Amirsina **Torfi**, and Nasser Nasrabadi. Deep siamese convolutional neural networks for identical twins and look-alike identification. *(accepted to be published under press)*, 2017
- Amisina **Torfi**, Sobhan Soleymani, and Vahid Tabataba Vakili. On the construction of polar codes for achieving the capacity of marginal channels. *arXiv preprint arXiv:1707.04512 (Accepted to be published in 55th Annual Allerton Conference on Communication, Control, and Computing)*, 2017 (Link)
- Amirsina **Torfi**, Sobhan Soleymani, Seyed Mehdi Iranmanesh, Hadi Kazemi, Rouzbeh A Shirvani, and Vahid T Vakili. Polar coding for achieving the capacity of marginal channels in nonbinary-input setting. *Information Sciences and Systems (CISS), 2017 51st Annual Conference on*, pages 1–6, 2017 (Link)
- French Pope III, Rouzbeh A Shirvani, Mugizi Robert Rwebangira, Mohamed Chouikha, Ayo Taylor, Andres Alarcon Ramirez, and Amirsina **Torfi**. Automatic detection of small groups of persons, influential members, relations and hierarchy in written conversations using fuzzy logic. *Proceedings of the International Conference on Data Mining (DMIN), Los Vegas, USA*, 2015 (Link)

Projects

2017 **TensorFlow World (project page)** Developer

• This open source project is aimed to provide simple and ready-to-use tutorials for TensorFlow

• This project has been GitHub trending repository of the month and also ranked in the top 150 open source projects in top GitHub repositories for Python language

2017 **Lip Reading - Cross Audio-Visual Recognition using 3D Convolutional Neural Networks (project page)** Developer

• This code is aimed to provide the implementation for Coupled 3D Convolutional Neural Networks for audio-visual matching.

• Lip-reading can be a specific extension for this work.

• GitHub trending repository of the day & week

2017 **3D Convolutional Neural Networks for Speaker Verification (project page)** Developer

• This code is aimed to provide the implementation for Speaker Verification (SR) by using 3D convolutional neural networks following the SR protocol

• GitHub trending repository of the day & week

2017 **SpeechPy - A Library for Speech Processing and Recognition (project page)** Developer

• This developed package provides most frequent used speech features including MFCCs and filterbank energies alongside with the log-energy of filterbanks

2016 **Face Recognition using Tensorflow (project page)** Developer

• This is a TensorFlow implementation of the face recognizer described in the paper FaceNet: A Unified Embedding for Face Recognition and Clustering

• The project also uses ideas from the paper A Discriminative Feature Learning Approach for Deep Face Recognition as well as the paper Deep Face Recognition from the Visual Geometry Group at Oxford

• This project has been GitHub trending repository