# 

Ph.D. candidate; interested in machine learning (ML), deep learning, pattern recognition, mathematics and their applications in computer vision. For more information, please refer to www.aldbi.com.

Interests: • Adversarial ML • Network Compression • Interpretable ML • Unsupervised Learning

#### **EDUCATION**

Present Jan. 2017	West Virginia University, Ph.D. in Electrical Engineering (GPA: 4.0/4.0)  Advisor: Dr. Nasrabadi, Co-advisor: Dr. Dawson	Morgantown, USA
-	<b>Sharif University of Technology</b> , M.Sc. in Electrical Engineering (GPA: 3.74/4.0) <i>Advisor: Dr. Jahed</i>	Tehran, Iran
SEP. 2013	Babol Noshirvani University of Technology, B.Sc. in Electrical Engineering	Babol, Iran

# **WORK EXPERIENCE**

Present Jan. 2017	West Virginia University, GRADUATE RESEARCH ASSISTANT Explored several topics within deep learning including adversarial robustness, generative models, network compression, prediction interpretation, un-/semi-/weakly-supervised learning, and deep metric learning.	Morgantown, USA
Nov. 2020 Aug. 2020	Microsoft, Computer Vision Research Intern Studied the impact of catastrophic forgetting on the natural and adversarial performance of continual learning methods.	Redmond, USA

# SELECTED PAPERS [SORTED BY DATE]

#### [1] Quality-Aware Multimodal Biometric Recognition

Soleymani, **Dabouei**, Taherkhani, Iranmanesh, Dawson, Nasrabadi In IEEE Transactions on Biometrics, Behavior, and Identity Science (TBIOM), 2021.

#### [2] SuperMix: Supervising the Mixing Data Augmentation [PDF] [Code]

Dabouei, Soleymani, Taherkhani, Nasrabadi

In 2021 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

# [3] Self-Supervised Wasserstein Pseudo-Labeling for Semi-Supervised Image Classification [PDF]

Taherkhani, Dabouei, Soleymani, Nasrabadi

In 2021 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

# [4] Exploiting Joint Robustness to Adversarial Perturbations [PDF]

Dabouei, Soleymani, Taherkhani, Dawson, Nasrabadi

In 2020 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020.

# [5] Transporting Labels via Hierarchical Optimal Transport for Semi-Supervised Learning [PDF]

Taherkhani, Dabouei, Soleymani, Dawson, Nasrabadi

In 2020 European conference on computer vision (ECCV), 2020.

# [6] Attribute Adaptive Margin Softmax Loss using Privileged Information [PDF]

Iranmanesh, Dabouei, and Nasrabadi.

In 2020 British Machine Vision Conference (BMVC), 2020.

## [7] SmoothFool: An Efficient Framework for Computing Smooth Adversarial Perturbations [PDF] [Code]

Dabouei, Taherkhani, Soleymani, Dawson, Nasrabadi

In 2020 IEEE Winter Conference on Applications of Computer Vision (WACV), 2020.

#### [8] Boosting Deep Face Recognition via Disentangling Appearance and Geometry

Dabouei, Taherkhani, Soleymani, Dawson, Nasrabadi

In 2020 IEEE Winter Conference on Applications of Computer Vision (WACV), 2020.

#### [9] Robust Facial Landmark Detection via Aggregation on Geometrically Manipulated Faces

Iranmanesh, Dabouei, Soleymani, Kazemi, Nasrabadi

In 2020 IEEE Winter Conference on Applications of Computer Vision (WACV), 2020.

<sup>\*</sup> For a complete list of publications please refer to google scholar.

# [10] A Weakly Supervised Fine Label Classifier Enhanced by Coarse Supervision

Taherkhani, Kazemi, **Dabouei**, Dawson, Nasrabadi In 2019 International Conference on Computer Vision (ICCV), 2019.

### [11] Fast Geometrically-perturbed Adversarial Faces [PDF] [Code]

Dabouei, Soleymani, Dawson, Nasrabadi

In 2019 IEEE Winter Conference on Applications of Computer Vision (WACV), 2018.

#### [12] Multi-Level Feature Abstraction from Convolutional Neural Networks for Multimodal Biometric Identification

Soleymani, Dabouei, Kazemi, Dawson, Nasrabadi

In 2018 International Conference on Pattern Recognition, 2018.

# **PATENTS**

- Cross-matching contactless fingerprints against legacy contact-based fingerprints.
- Fingerprint distortion rectification using deep convolutional neural networks.

## **AWARDS**

- Best Student Paper Award in 9th IEEE International Conference on Biometrics, 2018.
- IAPR Best Biometrics Student Award in IAPR International Conference on Biometrics, 2018.

#### REFERENCES

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