Ali Dabouei

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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*
Jan. 2016 Sep. 2013	**Sharif University of Technology**, M.Sc. in Electrical engineering (GPA: 3.74/4.0) *Advisor: Dr. Jahed*	*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]

* For a complete list of publications please refer to google scholar.

[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.

[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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