Ali DABOUEI ■ adabouei@andrew.cmu.edu G ali.dabouei@gmail O alldbi

Ph.D. in Electrical Engineering; interested in machine learning, deep learning, pattern recognition, mathematics, and their applications in computer vision and biomedical image analysis. For more information, please refer to www.aldbi.com.

WORK EXPERIENCE

| PRESENT APRIL 2022 | Carnegie Mellon University, POSTDOCTORAL RESEARCHER Developing deep models for video anomaly/highlight/moment detection and multi-modal video analysis tools. Also, exploring the theory of un-/semi-/weakly-supervised learning and its applications in computer vision and biomedical image analysis. | Pittsburgh, USA |
|------------------------|---|-----------------|
| May 2022 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 |

EDUCATION

| May 2022 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) <i>Advisor: Dr. Jahed</i> | Tehran, Iran |
| SEP. 2013 | Babol Noshirvani University of Technology, B.Sc. in Electrical Engineering | Babol, Iran |

SELECTED PAPERS [SORTED BY DATE]

[1] Revisiting Outer Optimization in Adversarial Training

Dabouei, Taherkhani, Soleymani, Nasrabadi

In 2022 European conference on computer vision (ECCV), 2022.

[2] Quality-Aware Multimodal Biometric Recognition

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

[3] SuperMix: Supervising the Mixing Data Augmentation [PDF] [Code]

Dabouei, Soleymani, Taherkhani, Nasrabadi

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

[4] 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.

[5] Exploiting Joint Robustness to Adversarial Perturbations [PDF]

Dabouei, Soleymani, Taherkhani, Dawson, Nasrabadi

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

[6] 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.

[7] Attribute Adaptive Margin Softmax Loss using Privileged Information [PDF]

Iranmanesh, Dabouei, and Nasrabadi.

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

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

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

Dabouei, Taherkhani, Soleymani, Dawson, Nasrabadi In 2020 IEEE Winter Conference on Applications of Computer Vision (WACV), 2020.

[9] 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.

[10] 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.

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

Taherkhani, Kazemi, Dabouei, Dawson, Nasrabadi

In 2019 International Conference on Computer Vision (ICCV), 2019.

[12] Fast Geometrically-perturbed Adversarial Faces [PDF] [Code]

Dabouei, Soleymani, Dawson, Nasrabadi

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

[13] 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

Nasser M. Nasrabadi

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