Ahmed Taha

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Research Interests

Computer Vision, Deep Learning, Machine Learning, Artificial Intelligence.

Technical Skills

Python, Tensorflow, PyTorch, Keras, JAVA, MATLAB, mex files.

Education

University of Maryland GPA: 4.0 / 4.0 Sep 2015 - Present
Ph.D. Student in CS Advisor: Prof. Larry Davis, Abhinav Shrivastava

Arab Academy For Science And Technology Dec 2011 - Jan 2014
Master Degree in business Administration - MBA GPA: 3.83 / 4.0.

Alexandria University, Egypt GPA: 3.81/4.0 Sept 2004 - July 2009
B.S., Computer and Systems Engineering Ranked 8^{th}

Alexandria University, Egypt GPA 3.66/4.0 Sept 2011 - Aug 2015
Studied Mathematic Engineering. Advisor: Dr. Marwan Torki.

Selected Publications

[C6] **Ahmed Taha**, Abhinav Shrivastava, Larry Davis.
★ Knowledge Evolution in Neural Networks.
Computer Vision and Pattern Recognition (**CVPR2021 Oral**)

[C5] **Ahmed Taha**, Xitong Yang, Abhinav Shrivastava, Larry Davis.
★ A Generic Visualization Approach for Convolutional Neural Networks.
European Conference on Computer Vision (**ECCV2020**)

[C4] **Ahmed Taha**, Yi-Ting Chen, Teruhisa Misu, Abhinav Shrivastava, Larry Davis.
★ Boosting Standard Classification Architectures Through a Ranking Regularizer.
Winter Conference on Applications of Computer Vision (**WACV2020**)

[C3] **Ahmed Taha**, Pechin Lo, Junning Li, Tao Zhao.
★ Convolution Networks for Kidney Vessels Segmentation from CT-Volumes.
International Conference on Medical Image Computing and Computer-Assisted Intervention (**MICCAI2018**)

[C2] **Taha, Ahmed** and Meshry, Moustafa and Yang, Xitong and Chen, Yi-Ting and Davis, Larry.

Last update: March 2021

★ Two Stream Self-Supervised Learning for Action Recognition
Computer Vision and Pattern Recognition Workshop (**CVPRW2018**)

[C1] **Ahmed Taha**, Marwan Torki.
★ Seeded laplacian: An interactive image segmentation approach using eigenfunctions
IEEE International Conference on Image Processing (**ICIP2015**)

Research Experience

[R4] [**2019 Honda Research Institute Internship**] Develop an interpretable video retrieval system for road-intersections scenarios. Mentor: Yi-Ting Chen.

[R3] [**2018 sponsored by Honda Research Institute**] Explore self-supervised learning, ego-motion action embedding, conditional and Bayesian retrieval uncertainty for autonomous navigation. Mentor: Yi-Ting Chen.

[R2] [**2017 Intuitive Surgical internship**] Develop robust algorithms to segment key anatomical structures from 3d volumetric images, in a fully automatic and semi-automatic fashion. Supervisor: Tao Zhao.

[R1] [**2016 Adobe Internship**] Develop a new selection\segmentation tool through patch matching. Supervisor: Stephen Schiller.

Selected Awards and Honors

[AW8] WACV Doctoral Consortium Plus Travel Award 2020.

[AW7] Outstanding Teaching Assistant Award for AY 2019-20 (Awarded to 2%).

[AW6] Gifted unrestricted **2500$** from Adobe Systems, Inc.

[AW5] University of Maryland Graduate School Dean's Fellowship, 2015 and 2016

[AW4] Awarded **four** successive times in college for the Excellent grade.

[AW3] Passing round one in **Microsoft Imagine Cup contest 2008**.

[AW2] Team has been chosen as one of the **Young Innovators' Awards(YIA)** Program winners for the academic year 2008/2009.

[AW1] Graduation project was chosen $\mathbf{2}^{nd}$ **best graduate project** by Alexandria University for year 2008/2009.

Teaching

Teaching Assistant — University of Maryland (6 Semesters)
CMSC132 (Object-Oriented Programming II - Using JAVA)
CMSC216 (Introduction to Computer Systems - Using C)
CMSC420 (Data Structures - Using JAVA)
CMSC426 (Computer Vision - Using PYTHON)

Languages: Arabic (Native Language), and English (Very Good)