## Nikolaos Sarafianos

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## Experience

• Facebook Reality Labs (Oculus Research), Research Scientist Intern, Sausalito, CA

(05.2018 - 08.2018)

- Generative models

Amazon, Alexa Machine Learning, Research Scientist Intern, Cambridge, MA

(05.2017 - 08.2017)

Multi-task learning

• University of Houston, Research Assistant, Houston, TX

(09.2014 - Present)

- Deep imbalanced attribute classification using visual attention [Python, MXNet]
- Deep visual attribute classification from images using curriculum and multi-task learning [Python, Theano]
- Learning using privileged information for gender and height estimation [Python]
- Survey on 3D human pose estimation [Matlab, CVX]
- National Center for Scientific Research Demokritos, Research Assistant, Athens, Greece

(12.2012 - 07.2014)

- Given a video of people speaking find "who spoke when" using audio-visual information [Matlab]

#### Education

• Ph.D. in Computer Science, University of Houston, Houston, TX

(09.2014 - Expected: **05.2019**)

Advisor: Prof. Ioannis Kakadiaris

- Diploma in Electrical and Computer Engineering, National Technical University of Athens, Greece (09.2008 10.2013)
  - 5-year studies equivalent to Master

#### **Publications**

- 1. N. Sarafianos, X. Xu and I.A. Kakadiaris. "Deep Imbalanced Attribute Classification using Visual Attention Aggregation," **ECCV 2018**
- 2. N. Sarafianos, T. Giannakopoulos, C. Nikou and I.A. Kakadiaris. "Curriculum Learning of Visual Attribute Clusters for Multi-Task Classification," Pattern Recognition 2018
- 3. N. Sarafianos, M. Vrigkas and I.A. Kakadiaris. "Adaptive SVM+: Learning with Privileged Information for Domain Adaptation," ICCV Workshops 2017
- 4. N. Sarafianos, T. Giannakopoulos, C. Nikou and I.A. Kakadiaris. "Curriculum Learning for Multi-Task Classification of Visual Attributes," ICCV Workshops 2017
- 5. N. Sarafianos, B. Boteanu, B. Ionescu and I.A. Kakadiaris. "3D Human Pose Estimation: A Review of the Literature and Analysis of Covariates," CVIU 2016
- 6. N. Sarafianos, C. Nikou, and I.A. Kakadiaris. "Predicting Privileged Information for Height Estimation," ICPR 2016
- 7. I.A. Kakadiaris, N. Sarafianos and C. Nikou. "Show me your body: Gender classification from still images," ICIP 2016
- 8. N. Sarafianos, T. Giannakopoulos, and S. Petridis, "Audio-visual speaker diarization using Fisher linear semi-discriminant analysis," Multimedia Tools and Applications 2014

### **Programming Skills**

• Girls Who Code instructor

• Proficient: Python Fluent: MATLAB, R, C++, Java, SQL

• Deep Learning frameworks: Tensorflow, MXNet Optimization Toolboxes: CVX, CVXOPT

#### Volunteering

• Grace Hopper celebration of women in computing

(2016, 2018)

(09.2016 - 05.2017)

 Houston Food Bank (03.2015)

# Awards

• University of Houston natural sciences and mathematics alumni scholarship	(05.2018)
• Conference on fairness, accountability, and transparency travel award	(02.2018)
• Google self-organizing conference on machine learning invitation	(11.2017)
• Best poster award at the University of Houston's PhD showcase	(04.2017)
• Hellenic professional society of Texas scholarship	(12.2016)
• NSF PETRA conference doctoral consortium travel award	(07.2015)

# Professional Service

• Teaching Assistant, University of Houston

(09.2014 - Present)

- Computer Vision, Computer Architecture, Databases, Automata, Intro to Programming (C++, Java)

# • Reviewer

- Computer Vision and Pattern Recognition Conference	(2015 - 2018)
- Transactions on Image Processing	(2018)
- International Conference on Image Processing	(2016, 2018)
- Automatic Face and Gesture Recognition Conference	(2015)
- International Conference on Biometrics	(2015)