Nikolaos Sarafianos

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Experience

- **Facebook, Oculus Research**, Research Scientist Intern, Sausalito, CA (Expected: 05.2018 - 08.2018)
  - Body tracking
- **Amazon, Alexa Machine Learning**, Research Scientist Intern, Cambridge, MA (05.2017 - 08.2017)
  - Deep multi-task/multi-label classification using audio data
- **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 (under review)
2. M. Leng, N. Sarafianos and I.A. Kakadiaris. ''Confidence-Driven Network for Point-to-Set Matching: Application to Multi-Probe Face Recognition,'' ICPR 2018 (under review)
3. N. Sarafianos, T. Giannakopoulos, C. Nikou and I.A. Kakadiaris. ''Curriculum Learning of Visual Attribute Clusters for Multi-Task Classification,'' Pattern Recognition 2018
4. N. Sarafianos, M. Vrigkas and I.A. Kakadiaris. ''Adaptive SVM+: Learning with Privileged Information for Domain Adaptation,'' ICCV Workshops 2017
5. N. Sarafianos, T. Giannakopoulos, C. Nikou and I.A. Kakadiaris. ''Curriculum Learning for Multi-Task Classification of Visual Attributes,'' ICCV Workshops 2017
6. 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
7. N. Sarafianos, C. Nikou, and I.A. Kakadiaris. ''Predicting Privileged Information for Height Estimation,'' ICPR 2016
8. I.A. Kakadiaris, N. Sarafianos and C. Nikou. ''Show me your body: Gender classification from still images,'' ICIP 2016
9. N. Sarafianos, T. Giannakopoulos, and S. Petridis, ''Audio-visual speaker diarization using Fisher linear semi-discriminant analysis,'' Multimedia Tools and Applications 2014

Programming Skills

- Proficient: **Python**, MATLAB
- **Deep Learning** frameworks: MXNet/Gluon, Tensorflow, Keras

Fluent: R, C++, Java, SQL

Optimization Toolboxes : CVX, CVXOPT

Volunteering

- **Girls Who Code** instructor (09.2016 - 05.2017)
- Grace Hopper celebration of women in computing - Anita Borg Institute (10.2016)
- Houston Food Bank (03.2015)

Awards

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