Nikolaos Sarafianos

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Experience

- **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)
  - Developed a **Deep Learning** method to classify the visual attributes of humans from images. [Python, Theano]
  - Developed a method to **predict privileged information** at test time for **height estimation**. [Python]
  - Developed a method employing **privileged information** for **gender classification** from images. [Python]
  - Survey on **3D human pose estimation**: created a dataset and evaluated state-of-the-art methods. [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. M. Leng, N. Sarafianos and I.A. Kakadiaris. ''Confidence-Driven Network for Point-to-Set Matching: Application to Multi-Probe Face Recognition,'' CVPR 2018 (under review)
2. N. Sarafianos, T. Giannakopoulos, C. Nikou and I.A. Kakadiaris. ''Curriculum Learning of Visual Attribute Clusters for Multi-Task Classification,'' Pattern Recognition 2017 (under review)
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

- 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)
- Math instructor of students from Houston underserved communities (09.2015 - 11.2015)

Awards

- **Google** Self-Organizing Conference on Machine Learning invitation (11.2017)
- Best poster award at the University of Houston's PhD showcase (04.2017)
- NSF PETRA conference doctoral consortium travel award (07.2015)