STAVROS TSOGKAS

6 King's College Rd., Toronto, Ontario, Canada
http://www.cs.toronto.edu/~tsogkas
email: tsogkas@cs.toronto.edu

Research Interests

My research interests are in the broad areas of computer vision and machine learning, with a focus on deep learning. I am particularly interested in the use of mid-level representations to bridge the gap between bottom-up and top-down processing and solve problems such as object detection, segmentation and grouping. I have devoted a large part of my research on recovering such representations, medial axes and object parts in particular, in natural and medical images.

Education

CentraleSupélec   Jan. 2016
Ph.D. in Mathematics and Computer Science
Thesis: Mid-level Representations for Modeling Objects
Advisor: Iasonas Kokkinos

National Technical University of Athens   Sep. 2011
Diploma in Electrical and Computer Engineering
Thesis: Learning-Based Symmetry Detection in Natural Images
Advisors: Petros Maragos, Iasonas Kokkinos

Peer-reviewed Conference Publications

- AMAT: Medial Axis Transform for Natural Images, *ICCV 2017*
  S. Tsogkas, S. Dickinson

- Prior-based Coregistration and Cosegmentation, *MICCAI 2016*
  M. Shakeri*, E. Ferrante*, **S. Tsogkas**, S. Lippe, S. Kadoury, I. Kokkinos, N. Paragios (* denotes equal contribution)

- Subcortical Brain Structure Segmentation Using FCNNs, *ISBI 2016* **(oral)**
  S. Tsogkas*, M. Shakeri*, E. Ferrante, S. Lippe, S. Kadoury, N. Paragios, I. Kokkinos (* denotes equal contribution)

- Accurate Human-Limb Segmentation in RGB-D images for Intelligent Mobility Assistance Robots
  ICCV 2015 3rd Workshop on Assistive Computer Vision and Robotics
  S. Chandra, **S. Tsogkas**, I. Kokkinos

- Deformable Part Models with CNN Features,
  ECCV 2014 Parts and Attributes workshop
  P.-A. Savalle, **S. Tsogkas**, G. Papandreou and I. Kokkinos

- Superpixel-grounded Deformable Part Models, *CVPR 2014*
  E. Trulls, **S. Tsogkas**, I. Kokkinos, A. Sanfeliu, F.Moreno

- Understanding Objects in Detail with Fine-grained Attributes, *CVPR 2014*
  A. Vedaldi, S. Mahendran, **S. Tsogkas**, S. Maji, B. Girshick, J. Kannala, E. Rahtu, I. Kokkinos, M. B. Blaschko, D. Weiss, B. Taskar, K. Simonyan, N. Saphra, S. Mohamed

- Learning-Based Symmetry Detection in Natural Images, *ECCV 2012*
  S. Tsogkas, I. Kokkinos

Reports	• ICCV 2017 Challenge: Detecting Symmetry in the Wild (editorial), *Detecting symmetry in the wild workshop, ICCV 2017* Chris Funk*, Seungkyu Lee*, Martin R. Oswald*, **Stavros Tsogkas***, Wei Shen, Andrea Cohen, Sven Dickinson, Yanxi Liu (* denotes equal contribution)
	• Deep Learning for Semantic Part Segmentation with High-Level Guidance, *arXiv report* **S. Tsogkas**, I. Kokkinos, G. Papandreou, A. Vedaldi

Research Experience	**Samsung AI Center Toronto** Research Scientist	Sep. 2018 - present
	Vector Institute for Artificial Intelligence Affiliate postdoctoral fellow	Jan. 2018 - present
	University of Toronto Postdoctoral fellow, Computer Science Department Supervisor: Sven Dickinson	Oct. 2016 - Sep. 2018
	CentraleSupélec Research engineer, CVN lab Supervisor: Nikos Paragios *Convolutional neural networks for semantic segmentation of organs in computed tomography scans.*	Jan. 2016 - Aug. 2016
	Oxford University (Visual Geometry Group) Research intern Supervisor: Andrea Vedaldi. *Combined convolutional neural networks and restricted boltzmann machines for semantic segmentation of object parts.*	Aug.-Nov. 2014

Teaching Experience	**Teaching assistant (CentraleSupélec)** • Signal Processing (undegrad course). • Computer Vision (undegrad course). • Machine Learning for Computer Vision (MVA master course)	2011-2015
	Invited lecturer (CentraleSupélec/ESSEC) MSc in Data Science and Business Analytics Seminar on deep learning theory and tools.	2016

Professional Activities	**Reviewer**, IEEE TPAMI, IJCV, CVIU, IMAVIS, IEEE ICCV, IEEE CVPR, ECCV, ICVGIP, BMVC, Morgan & Claypool Synthesis lectures on Computer Vision **Co-organizer** of the "Detecting Symmetry in the Wild" workshop, in conjunction with ICCV 2017, Venice, Italy.	
	Treasurer, IEEE NTUA Student Branch	2010-2011
	Chairman, IEEE NTUA Student Branch	2011-2012
	Student member IEEE	2012-2015

Programming Skills	MATLAB, Python, Lua, C++, Latex, Caffe, MatConvNet, Torch.

Distinctions	Outstanding reviewer award (ECCV 2016)

Citizenship   Greek

Languages   English (fluent), French (proficient), Greek (native).