

Nikolaos Karianakis

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Date of Birth	July 15 th , 1986	
Nationality & Citizenship	Greek	US Visa: F1 (until Dec 2021)
Education	University of California, Los Angeles, USA Master's [2011-2014] & Ph.D. [2011-2017] in Computer Science <ul style="list-style-type: none">• Area: Computer Vision & Machine Learning.• Focus: Deep Learning. Advisor: Prof. Stefano Soatto. National Technical University of Athens, Greece Diploma in Electrical & Computer Engineering [2004-2011] <ul style="list-style-type: none">• Major: Computer Science & Computer Engineering.• Minors: Electronics, Systems (Signals / Control / Robotics).• Thesis: Digital Restoration of Prehistoric Thera Wall-paintings. Area: Computer Vision. Advisor: Prof. Petros Maragos.	
Experience	Researcher <i>July 2017 - today</i> • Deep Learning, Video Analytics, Custom Vision. Manager: Gang Hua. Microsoft, Redmond <i>Cloud & AI, Vision Group</i> Research Intern <i>June - September 2016</i> • Person re-identification. Reinforcement learning. Mentor: Zicheng Liu. Microsoft Research, Redmond <i>Computer Vision & Machine Learning</i> R & D Engineering Intern <i>June - September 2015</i> • Algorithm development, framework implementation and simulation, plus real-environment testing with iCart mini. Q reinforcement learning and deep neural networks to learn autonomous navigation. Mentor: Yusuke Watanabe. Sony, Tokyo <i>Intelligent System Technology Department</i> Research Intern <i>July - September 2014</i> • I collaborated with Thomas Fuchs and invented an algorithm for generic object detection, which builds on boosting techniques and deep features. NASA's Jet Propulsion Laboratory, Pasadena <i>Computer Vision & Machine Learning</i> Research Intern <i>July - September 2013</i> • RBMs, occlusion detection, depth estimation. Advisor: Yizhou Wang. Peking University, Beijing <i>Institute of Digital Media, Computer Science</i> Graduate Research Assistant <i>September 2011 - June 2017</i> • Learning and engineering representations and deep architectures to solve problems such as large-scale detection & classification, occlusion detection and wide-baseline correspondence. Advisor: Stefano Soatto. University of California, Los Angeles <i>Computer Vision & Machine Learning</i>	

Research Assistant **National Technical University of Athens**
November 2010 - September 2011 *Electrical & Computer Engineering*

- Digital restoration of prehistoric Thera wall paintings. Image segmentation, total variation inpainting, seamless image stitching. Advisor: Petros Maragos

<i>Publications</i>	<p>Reinforced Temporal Attention and Split-Rate Transfer for Depth-Based Person Re-Identification. N. Karianakis, Z. Liu, Y. Chen and S. Soatto. <i>In European Conference on Computer Vision</i>, September 2018.</p> <p>An Empirical Evaluation of Current Convolutional Architectures' Ability to Manage Nuisance Location and Scale Variability. N. Karianakis, J. Dong and S. Soatto. <i>In IEEE Conference on Computer Vision and Pattern Recognition</i>, June 2016.</p> <p>Multiview Feature Engineering and Learning. J. Dong, N. Karianakis, D. Davis, J. Hernandez, J. Balzer and S. Soatto. <i>In IEEE Conference on Computer Vision and Pattern Recognition</i>, June 2015.</p> <p>Visual Scene Representations: Scaling & Occlusion in Convolutional Architectures. S. Soatto, J. Dong and N. Karianakis. <i>In International Conference on Learning Representations workshop</i>, May 2015.</p> <p>Boosting Convolutional Features for Robust Object Proposals. N. Karianakis, T. J. Fuchs and S. Soatto. <i>ArXiv</i>, March 2015.</p> <p>Learning to Discriminate in the Wild: Representation-Learning Network for Nuisance-Invariant Image Comparison. N. Karianakis, Y. Wang and S. Soatto. <i>Technical Report</i>, December 2013.</p> <p>An integrated System for Digital Restoration of Prehistoric Thera Wall Paintings. N. Karianakis and P. Maragos. <i>In IEEE International Conference on Digital Signal Processing</i>, July 2013.</p>
<i>Research Interests</i>	Deep Learning, Computer Vision, Machine Learning, Robotics, Algorithms.
<i>Technical Skills</i>	C/C++, Python, Lua, Matlab, ROS, Haskell, ML, Prolog, Assembly x86/AVR, CUDA, \LaTeX , Caffe, Torch, MatConvNet, PyTorch, TensorFlow, Theano.
<i>Teaching Experience</i>	<p><i>Graduate Teaching Fellow</i> University of California, Los Angeles</p> <p>Computer Science I (CS31; Fall 2012, Fall 2013, Winter 2014, Fall 2014). Instructors: David Smallberg, Michael Shindler.</p> <p>Computer Science II (CS32; Winter 2013, Spring 2013, Winter 2015). Instructors: David Smallberg, Carey Nachenberg.</p> <p>Computer Organization (CS33; Spring 2014). Instructor: Glenn Reinman.</p> <p>Machine Learning Algorithms (CS260; Fall 2015). Instructor: Ameet Talwalkar. <i>Nominated by the CS department for the Distinguished Teaching award.</i></p>