

# Nikolaos Karianakis

---

<b>Contact Information</b>	<b>E-mail:</b> nikarian@microsoft.com <b>Mobile:</b> (+1) 310 562 7962 <b>Web:</b> <a href="https://karianakis.github.io/">https://karianakis.github.io/</a>	<b>Work Address:</b> Microsoft Studio C, Office # 3468 3640 150th Ave NE, Redmond, WA 98052
<b>Date of Birth</b>	July 15 <sup>th</sup> , 1986	
<b>Nationality &amp; Citizenship</b>	Greek	US Permanent Resident: since Dec 2019
<b>Education</b>	<b>University of California, Los Angeles, USA</b> <b>Master's [2011-2014] &amp; Ph.D. [2011-2017] in Computer Science</b> <ul style="list-style-type: none"><li>• Area: Computer Vision &amp; Machine Learning.</li><li>• Focus: Deep Learning. Advisor: Prof. Stefano Soatto.</li><li>• Dissertation: Sampling Algorithms to Handle Nuisances in Large-Scale Recognition.</li></ul> <b>National Technical University of Athens, Greece</b> <b>Diploma in Electrical &amp; Computer Engineering [2004-2011]</b> <ul style="list-style-type: none"><li>• Major: Computer Science &amp; Computer Engineering.</li><li>• Minors: Electronics, Systems (Signals / Control / Robotics).</li><li>• Thesis: Digital Restoration of Prehistoric Thera Wall-paintings. Area: Computer Vision. Advisor: Prof. Petros Maragos.</li></ul>	
<b>Experience</b>	<b>Principal Researcher (Sep 2020 - present)</b> <b>Microsoft, Redmond</b> <b>Senior Researcher (July 2017 - Aug 2020)</b> <i>Cloud &amp; AI, Vision Group</i> <ul style="list-style-type: none"><li>• Deep Learning, Custom Vision, Domain Adaptation (current focus: synthetic to real data, high-altitude aerial images). Manager: Dimitrios Lymberopoulos.</li></ul> <b>Research Intern</b> <b>Microsoft Research, Redmond</b> <i>June - September 2016</i> <i>Computer Vision &amp; Machine Learning</i> <ul style="list-style-type: none"><li>• Person re-identification. Reinforcement learning. Mentor: Zicheng Liu.</li></ul> <b>R &amp; D Engineering Intern</b> <b>Sony, Tokyo</b> <i>June - September 2015</i> <i>Intelligent System Technology Department</i> <ul style="list-style-type: none"><li>• 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.</li></ul> <b>Research Intern</b> <b>NASA's Jet Propulsion Laboratory, Pasadena</b> <i>July - September 2014</i> <i>Computer Vision &amp; Machine Learning</i> <ul style="list-style-type: none"><li>• I collaborated with Thomas Fuchs and invented an algorithm for generic object detection, which builds on boosting techniques and deep features.</li></ul> <b>Research Intern</b> <b>Peking University, Beijing</b> <i>July - September 2013</i> <i>Institute of Digital Media, Computer Science</i> <ul style="list-style-type: none"><li>• RBMs, occlusion detection, depth estimation. Advisor: Yizhou Wang.</li></ul> <b>Graduate Research Assistant</b> <b>University of California, Los Angeles</b> <i>September 2011 - June 2017</i> <i>Computer Vision &amp; 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

An integrated System for Digital Restoration of Prehistoric Theran Wall Paintings.  
N. Karianakis and P. Maragos.  
*In IEEE International Conference on Digital Signal Processing (DSP)*, 2013.

**Technical Skills** C/C++, Python, Lua, Matlab, ROS, Haskell, ML, Prolog, Assembly x86/AVR, CUDA, ~~TeX~~, Caffe, Torch, MatConvNet, PyTorch, TensorFlow, Theano.