Nikolaos Karianakis

Contact Information

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Microsoft Studio C
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Experience

Principal Research Manager *(June 2021 - present)* — **Microsoft, Redmond**
Principal Researcher *(Sep 2020 - May 2021)* — Spectre AI, Mixed Reality
Senior Researcher *(July 2017 - Aug 2020)*

- Deep Learning, Computer Vision for Aerial Imaging, AutoML, Synthetic Data.

Research Intern — **Microsoft Research, Redmond**
June - September 2016 — Computer Vision & Machine Learning

- Person re-identification, Reinforcement learning.

R&D Engineering Intern — **Sony, Tokyo**
June - September 2015 — Intelligent System Technology Department

- Algorithm development, framework implementation and simulation, real-environment testing with iCart mini. Q reinforcement learning and deep learning for autonomous navigation.

Research Intern — **NASA's Jet Propulsion Laboratory, Pasadena**
July - September 2014 — Computer Vision & Machine Learning

- Algorithm development for generic object detection, which builds on top of ML boosting and deep convolutional features.

Research Intern — **Peking University, Beijing**
July - September 2013 — Institute of Digital Media, Computer Science

- RBMs, occlusion detection, depth estimation.

Graduate Research Assistant — **University of California, Los Angeles**
September 2011 - June 2017 — Computer Science

- Deep Learning, Computer Vision. Learning and engineering representations and deep architectures for large-scale recognition and wide-baseline correspondence. Advisor: Stefano Soatto.

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

- Computer Vision. Image segmentation, TV inpainting, image stitching. Advisor: Petros Maragos.

Education

University of California, Los Angeles, USA
Master's [2011-2014] **& Ph.D.** [2011-2017] **in Computer Science**

- Area: Computer Vision & Machine Learning.
- Dissertation: Sampling Algorithms to Handle Nuisances in Large-Scale Recognition.

National Technical University of Athens, Greece
Diploma in Electrical & Computer Engineering

- Major: Computer Science & Computer Engineering.
- Minors: Electronics, Systems (Signals / Control / Robotics).

Expertise

Deep Learning, Computer Vision, Machine Learning, LLM, Algorithms.

Technical Skills

C/C++, Python, Lua, Matlab, ROS, Haskell, ML, Prolog, Assembly x86/AVR, CUDA, LaTeX, Caffe, Torch, MatConvNet, PyTorch, TensorFlow, Theano.