



Research & Development Summary

Research Published at top systems conferences ([NSDI'18](#), [CoNEXT'19](#), [NSDI'22](#)) and journals ([ACM TOCS'21](#)). My research is featured in the [ACM Technews](#), [PHYS.ORG](#), [ECN](#), [KTH](#), and [APNIC](#). Reviewer for scientific journals (e.g., IEEE/ACM Transactions on Networking). Since 2010, I have participated in 12 (mainly EU) research projects.

Development [Module owner](#) and main contributor to the industrial-grade network operating system [ONOS](#) and the [Data Plane Development Kit \(DPDK\)](#). Co-leading open source projects in the area of NFV, such as [FastClick](#), Metron's [control](#) and [data](#) planes, as well as [RSS++](#).

Experience

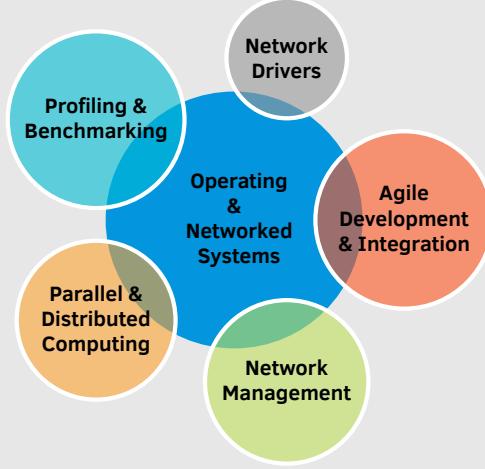
Nov. 2019 Present	SDN/NFV R&D Engineer	UBITECH
	<ul style="list-style-type: none"> SDN and NFV development for the Maestro Cloud orchestrator. Research and development activities in the context of programmable cloud-native networked systems and 5G networks. <p><u>Tools:</u> Kubernetes, OpenStack, ONOS, Stratum (P4), DPDK, OVS, and NETCONF/YANG.</p> <p><u>Hardware:</u> Intel architectures and Amarisoft 5G system.</p>	
Oct. 2019 Sep. 2020	Post Doctoral Researcher	KTH NSLab
	<ul style="list-style-type: none"> Packet scheduling techniques for low latency Internet services. Benchmarked the hardware classifiers of 100-200 GbE Mellanox network cards (NICs). <p><u>Tools:</u> DPDK, Click, OVS, Mellanox drivers, and DevOps.</p> <p><u>Hardware:</u> Intel architectures and Mellanox Smart NICs.</p>	
Feb. 2019 Oct. 2019	Military Service	Computer Science and Research Division @ Greek Army
	Networked systems engineer at the Department of Networking.	
Oct. 2018 Dec. 2018	Post Doctoral Researcher	KTH NSLab
	<ul style="list-style-type: none"> Integrated NFV service chains with blackboxes at 100 Gbps. Designed RSS++ for intra-server load-balancing at 100 Gbps. <p><u>Tools:</u> Linux, ONOS, DPDK, Click, SR-IOV, KVM, and DevOps.</p> <p><u>Hardware:</u> Intel architectures and Mellanox NICs.</p>	
May 2017 Sep. 2018	Industrial Ph.D. Student	RISE and KTH NSLab
	<ul style="list-style-type: none"> Implemented Metron for NFV service chaining at 100 Gbps. Implemented dynamic scaling techniques for NFV at 10 Gbps. <p><u>Tools:</u> ONOS, DPDK, Click, OpenFlow, REST, and DevOps.</p> <p><u>Hardware:</u> Intel architecture, Mellanox NICs, & OpenFlow switches.</p>	
Jul. 2014 Apr. 2017	Licentiate Student (Halfway to Ph.D.)	KTH NSLab
	<ul style="list-style-type: none"> Synthesized the internal operations of NFV service chains with SNF, enabling complex service chains to operate at line-rate 40 Gbps. Combined profiling and task scheduling techniques with I/O batching (SCC) to reduce the latency of traversing NFV service chains. <p><u>Tools:</u> Linux, Perf, Intel PCM, DPDK, ixgbe, Click, OpenFlow, and Git.</p> <p><u>Hardware:</u> Intel architecture, Intel NICs, and OpenFlow switches.</p>	
Oct. 2013 Jun. 2014	Research Assistant	IMDEA Networks
	<ul style="list-style-type: none"> Developed abstractions for integrating heterogeneous SDN control plane operations. <p><u>Tools:</u> Linux, OpenDaylight, Ryu/POX, Mininet, OpenFlow, and SVN.</p>	
Apr. 2010 Sep. 2013	Research Assistant	NKUA SCAN Lab
	<ul style="list-style-type: none"> Developed machine learning techniques for autonomic network management in heterogeneous wireless networks. <p><u>Tools:</u> Linux (OpenWrt), Java, REST, and SVN.</p>	

Georgios P. Katsikas

Ph.D., Computer & Networked Systems

- gkatsikas@ubitech.eu
- [gkatsikas.github.io](https://github.com/gkatsikas)
- [georgioskatsikas](https://www.linkedin.com/in/georgioskatsikas)
- [Google Scholar](https://scholar.google.com/citations?user=HdJyQAAJAAQ&hl=en)
- [gkatsikas](https://orcid.org/0000-0002-4042-132X)
- [gkatsikas](https://www.scopus.com/authid/detail.uri?authorId=7005522100)

Technical Skills Overview



Programming

- Linux • C • C++ • Java • Python

SDN (ONOS, Stratum, NETCONF/YANG)

NFV (K8s, OpenStack, DPDK, Click)

- Git • Docker • Vagrant • Ansible

Education

Ph.D., Computer & Networked Systems

KTH Royal Institute of Technology
Dep. of Communication Systems
2014 - 2018 | Stockholm, Sweden

M.Sc., Comm/tion Systems & Networks

National & Kapodistrian University of Athens
Dep. of Informatics & Telecommunications
2010 - 2012 | Athens, Greece

B.Sc., Informatics & Telecommunications

National & Kapodistrian University of Athens
Dep. of Informatics & Telecommunications
2005 - 2010 | Athens, Greece