Marios Kogias

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RESEARCH FOCUS Operating Systems, Networking, Datacenters, Tail Latency, Remote Procedure Calls, Dataplanes, Scheduling, Load-balancing, Network Transports, Programmable Switches

EDUCATION

Doctor of Philosophy

September 2015 - August 2020

School of Computer and Communication Sciences

École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

Advisor: Edouard Bugnion

Diploma (5-year degree, Master's equivalent)

October 2009 - October 2014

School of Electrical and Computer Engineering

National Technical University of Athens (NTUA), Greece

Thesis Advisor: Nektarios Koziris

GPA: 9.36/10.00 (top 2%)

EXPERIENCE

Post-Doctoral Researcher

September 2020 - present

Microsoft Research, Cambridge, US Confidential Computing Group

Research Intern

June 2018 - September 2018

Microsoft Research, Redmond, US

I worked as part of the Cloud Efficiency group on latency-critical VM scheduling.

Advisors: Ricardo Bianchini, Sameh Elnikety

Software Engineering Intern

June 2016 - September 2016

Google, Mountain View, US

I worked as part of the Platforms team on performance analysis of the Google data-

center network. Advisor: Malweeka Tewari

Software Engineering Intern

November 2014 - April 2015

CERN, Geneva, CH

I worked on the invenio project, a digital library software, implementing a new search engine based on ElasticSearch.

Software Engineering Intern

May 2014 - August 2014

Google Summer of Code - LTTng project

I worked on implementing a tracing pipeline for Ceph's RADOS on LTTng and Twitter's Zipkin. This work was taken over by Ceph and now is part of their upstream repository.

Junior Developer

July 2013 - September 2013

okeanos, GRNET, Athens, GR

I contributed to the Synneso project, specifically on the virtual networking infrastructure implementing the Openstack Neutron API for Synneso in Python Django

Founder, Software Engineer sourcelair.com, Athens, GR

December 2010 - September 2013

I worked on sandboxing untrusted code execution and the sourcelair iOS application.

CONFERENCE

Bypassing the Load Balancer Without Regrets PUBLICATIONS Marios Kogias, Rishabh Iyer, Edouard Bugnion

SoCC 2020

HovercRaft: Scalability and Fault-tolerance for μ s-scale Datacenter Services

Marios Kogias, Edouard Bugnion

Eurosys 2020 Best Student Paper Award

R2P2: Making RPCs first-class datacenter citizens

Marios Kogias, George Prekas, Adrien Ghosn, Jonas Fietz, Edouard Bugnion

Usenix ATC 2019

Lancet: A self-correcting Latency Measuring Tool Marios Kogias, Stephen Mallon, Edouard Bugnion

Usenix ATC 2019

ZygOS: Achieving Low Tail Latency for Microsecond-scale Networked Tasks George Prekas*, Marios Kogias*, Edouard Bugnion (*equal co-authors)

SOSP 2017

WORKSHOP

Tail-tolerance as a Systems Principle not a Metric

PUBLICATIONS Marios Kogias, Edouard Bugnion

APNet 2020

Flow Control for Latency-Critical RPCs Marios Kogias, Edouard Bugnion

KBnets@SIGCOMM18

POSTERS

SLOG: Your switch is also your load-generator Marios Kogias, Martin Weber, Edouard Bugnion

NSDI 2020

Measuring Latency: Am I doing right?

Marios Kogias, Christos Kozyrakis, Edouard Bugnion

NSDI 2017

TEACHING

Principles of Computer Systems (EPFL, CS-522) Introduction to Operating Systems (EPFL, CS-323)

Database Systems (EPFL, CS422) Mise a Niveau (EPFL, MAN)

Computer Networks (EPFL, COM-208)

Winter 2017,2018,2019

Spring 2019 Spring 2018 Spring 2017Winter 2016

PROFESSIONAL ASPLOS 2020 Artifact Evaluation Committee

SERVICE

Eurosys 2020 Shadow PC Eurosys 2017 Shadow PC

External Reviewer for IEEE/ACM Transactions on Networking

AWARDS Eurosys 2020 Best Student Paper Award

2019 IBM PhD Fellowship EPFL PhD Fellowship 2015-2016

 $\mathbf{GRANTS} \qquad \qquad \text{Microsoft Swiss JRC, Project: TTL-MSR (co-PI)}$

Usenix Student Grant to attend NSDI 2017