Zacharias Georgiou

Personal Data

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Work Experience

16 Jan 2017- Current

Researcher at LINC *Lab, University of Cyprus*

I work at the Laboratory of Internet Computing at the University of Cyprus. The laboratory, focuses its research activities in the areas of Cloud and Grid computing, Web data management and Vehicular computing. I am currently working on a project funded under the Horizon 2020 framework, named RAINBOW. RAINBOW is a novel framework for Fog services development, orchestration, deployment and continuous management. Previously I worked on a project funded under the Horizon 2020 framework, named UNICORN. UNICORN is a novel framework for multi-cloud services development, orchestration, deployment and continuous management.

07 Jun- 29 Jul 2016

Summer Internship at XM *Company , Limassol, Cyprus*

I've been introduced to functional programming concepts and software design patterns. I developed an open-source library written in Elm (https://github.com/zgeorg03/table-elm) for a generic html table with sorting, pagination, filtering and some other useful functionalities.

21 May- 05 Jun 2016

Internship at Huawei *Company , Beijing & Shenzen, China*

Participated in a two weeks program called "Seeds for the future" organized by Huawei. I trained at Huawei's campus on their networking equipment in Shenzhen. The training consisted of various lectures and practice on real hardware in Mobile Internet Application Development Trend, Intelligent Network Application and Development Trend and Cloud Pipe Devices.

Jan-Jun 2016

Research at DMSL *Lab , University of Cyprus*

My work was about developing a simulator using Java in order to compare different algorithms for prefetching data, for indoor navigation in intermittently connected wifi networks. The prefetching technique feteches the paths that a user is more likely to navigate, when connection exists. When connection is lost, the prefetched data can improve accuracy.

Jun-Aug 2015

Summer Internship at SEIT *Lab, University of Cyprus*

My work was about developing a Universal Remote Controller. URC offers the ability to control home appliances that support infared technology, from any place using the internet. I developed a small web server using Flask microframework, running on raspberry Pi, which you could record infared signals(air-condition, tv), store them in a database(MySQL) and transmit them remotely using the web site.

Summer 2014

Summer Internship at Xi *Lab, University of Cyprus*

My job was to find the representative regions of SPEC CPU 2006 benchmarks suit using pin tool and simalpha (cycle accurate CPU simulator). The representative region of a benchmark is block of code that has specific properties. Condor, gnuplot and some basic commands in linux were used during this internship.

Education

Expected 2023	Phd in Computer Science, **University of Cyprus**, Nicosia Supervisors: Prof. Marios Dikaiakos & Prof. George Pallis
Feb 2020	Master Degree in Computer Science, **University of Cyprus**, Nicosia **Thesis**: *"StreamSight: A Query-Driven Framework for Streaming Analytics in Edge Computing"* | Advisor: Prof. George Pallis
Jun 2017	Undergraduate Degree in Computer Science, **University of Cyprus**, Nicosia **Thesis**: *"Characterizing the Popularity, Virality and Sentimentalism of Video Content Categories on YouTube and Twitter"* | Advisor: Prof. George Pallis Gpa: 8.59/10 | Detailed List of Lessons
Aug - Jan 2015	Exchange Semester at **University of Groningen**, Netherlands Gpa: 7.70/10 | Detailed List of Lessons
Jun 2011	**Aradippou Lyceum** , Larnaca | Final Grade: 9.46/10

Selected Publications

2019 - **"Query-Descriptive Analytics for IoT and Edge Computing"**, Moysis Symeonides, Demetris Trihinas, Zacharias Georgiou, George Pallis and Marios D. Dikaiakos, IEEE International Conference on Cloud Engineering (IC2E), 2019.

2018 - **"StreamSight: A Query-Driven Framework for Streaming Analytic in Edge Computing"**, Zacharias Georgiou, Moysis Symeonides, Demetris Trihinas, George Pallis and Marios D. Dikaiakos, 11^{th} IEEE/ACM Conference on Utility and Cloud Computing, 2018.

2018 - **"IoT Data Prefetching in Indoor Navigation SOAs"**, Andreas Konstantinidis, Panagiotis Irakleous, Zacharias Georgiou, Demetrios Zeinalipour-Yazti and Panos K. Chrysanthis, ACM Transactions on Internet Technology (TOIT '18), pp. 20 pages, 2018.

2017 - **"Improving Rule-Based Elasticity Control by Adapting the Sensitivity of the Auto-Scaling Decision Timeframe"**, Demetris Trihinas, Zacharias Georgiou, George Pallis and Marios D. Dikaiakos, *"Third International Workshop on Algorithmic Aspects of Cloud Computing (ALGOCLOUD 2017), in conjunction with the ALGO 2017 Conference" (ALGO 2017 Conference)*, Vienna, Austria, 2017

Selected Events Attended

16-20 Dec 2018	UCC18 - 11^{th} IEEE/ACM Conference on Utility and Cloud Computing, *Zurich, Switzerland* *Presented the work "StreamSight: A Query-Driven Framework for Streaming Analytic in Edge Computing"*
2-4 Jul 2018	16^{th} Hellenic Data Management Symposium, *Larnaca, Cyprus* *Presented the work "Improving Rule-Based Elasticity Control by Adapting the Sensitivity of the Auto-Scaling Decision Timeframe"*
5 Sep 2017	ALGO2017 - The 3rd International Workshop on Algorithmic Aspects of Cloud Computing, *Vienna, Austria* *Presented the work "Improving Rule-Based Elasticity Control by Adapting the Sensitivity of the Auto-Scaling Decision Timeframe"*
25-30 Jun 2017	SummerSoc - The 11th Symposium and Summer School On Service-Oriented ComputingCloud Computing, *Crete, Greece* *Presented a Poster "Fine-grained Elasticity Control Framework for the Cloud"*

Other Activities

2020 - Reviewer at the IEEE Transactions on Cloud Computing (TCC) journal

2020 - Reviewer at the 20^{th} International Symposium on Cluster, Cloud, and Internet Computing (CCGRID)

2020 - Reviewer at the 2020 IEEE International Conference on Fog Computing (ICFC)

2019 - Reviewer at the 39^{th} International Conference on Distributed Computing Systems (ICDCS) on the Edge Computing research track.

Awards and Certificates

Feb 2020 1st place in the 1st Cybersecurity-Cyberdefence Hackathon in Cyprus with the platform "Veracity", (Nicosia, Cyprus)

Apr 2019 Winner of the People's Choice Award of the 4th Innovation & Entrepreneurship Forum with the project "StreamSight", (Nicosia, Cyprus)

Sep 2018 1st place in OpenData Hackathon Cyprus competition with team ProlepSYS Also winners of the Smart City challenge, (Limassol, Cyprus)

May 2011 CCNA Discovery: "Working to a SmalltoMedium Business or ISP"

Dec 2010 CCNA Discovery: "Networking for home and small businesses"

Jun 2010 IGCSE English Language | Grade: C

Jun 2010 IGCSE Computers | Grade: B

May 2010 2nd Pancyprian Award in TEKE (Institute of Technology)

Apr 2010 3rd Pancyprian Award in Logipaignion (University of Cyprus)

Languages

Greek, English

Skills

Programming Languages:	Java, Scala, Python, C, Javascript
Databases:	MySQL, Postgres MongoDB, Cassandra, Couchbase
Development Tools :	Git, Intellij, Eclipse, Vim
Big Data Processing Frameworks:	Apache Spark, Apache Kafka
Web Frameworks:	SpringBoot, Flask, Angular
Cloud Tools/Platforms:	Kubernetes, Docker Swarm, AWS Cloud, Google Cloud Platform, Openstack, Docker

Interests

Cloud Computing, Fog Computing, Big Data Analytics, Distributed Systems, Statistical Learning, Reinforcement Learning, Philosophy

Undergraduate Degree in Computer Science

Grades

Lesson (eng)	Grade	ECTS [1]	
Programming Principles I	8.0	7.5	
Discrete Structures in Computer Science and Computation	8.0	7.5	
Principles of Management	7.5	5.0	
Calculus for Computer Scientists I	7.0	5.0	
General Advanced English	9.0	5.0	
Digital Systems	9.0	7.5	
Programming Principles II	8.5	7.5	
Calculus for Computer Scientists II	7.5	5.0	
English for Computer Science	9.0	5.0	
Integrative Biology of Organisms	7.5	6.0	
Explorations into Computer Science	10.0	3.0	
Computer Organization and Assembly Programming	10.0	7.5	
Data Structures and Algorithms	8.0	7.5	
Linear Algebra I for Computer Science	8.5	5	
Introduction to Probability and Statistics	9.0	7.0	
Theory of Computation and Complexity	8.5	7.5	
Operating Systems	8.5	7.5	
Object Oriented Programming	8.5	7.5	
Systems Analysis Design	8.5	7.5	
Introduction to Economics	8.5	7.5	
Theory and Practise of Compilers	8.5	7.5	
Algorithms and Complexity	8.0	7.5	
Artificial Intelligence	6.5	7.5	
Database Systems	8.0	7.5	
Systems Programming	9.0	7.5	
Spanish Language I	9.0	5.0	
Networks and Communications	8.0	7.5	
Software Engineering	9.0	7.5	
Diploma Project I	10.0	7.5	
Distributed Algorithms	10.0	7.5	
Tennis	10.0	3.0	
Diploma Project II	10.0	10.0	
		Total	242.5
		Gpa	**8.59**

Exchange Program at University of Groningen, Netherlands

Grades

Lesson	Grade	ECTS
Modelling and Simulation	7.5	5
Information Security	8.5	5
Introduction to Intelligent Systems	8.0	5
Introduction to Computational Systems	7.5	5
Neural Networks	7.5	5
Machine Learning	7.0	5
Gpa	**7.70**	

Master Degree at University of Cyprus, Nicosia

Grades

Lesson	Grade	ECTS
Avanced Software Engineering	8.0	8
Avanced Topics in Databases	8.5	8
Information Retrieval and Search Engines	9.5	8
Statistical Learning	8.0	10
Advanced Computer Architecture	7.0	8
Computer Networks and the Internet	8.0	8
Advanced Security Topics	9.5	8
Research Methods & Professional Practices in Computer Science	Pass	3
	Gpa	**8.34**

[1] 1 ECTS credit = 28 hours of study