Iacovos G. **Kolokasis**

ICS-FORTH, 100 N. Plastira Av. Vassilika Vouton, Heraklion, GR-70013, Greece

✉ kolokasis@ics.forth.gr | 🏠 www.csd.uoc.gr/~kolokasis | jackkolokasis

Research Interests

- Large Scale Distributed Systems
- Memory and Storage Systems
- Big Data Computations
- Java Virtual Machines
- Computer Systems
- Operating Systems

Professional Experience

SAP HANA VORA   *Walldorf, Germany*

Intern Research Student   *Jun. 2019 - Present*

- Improving performance of SQL query compiler by optimize semantic analysis using efficient and low memory consumption data structures.

ICS–FORTH   *Heraklion, Greece*

Graduate Research Assistant   *Sep. 2017 - May 2019*

- Researched approaches to expand memory address space for JVM-based large-scale data analytics frameworks using fast storage devices (SSDs, NVM)
- Implemented extra storage level on Apache Spark to cache data off-heap on non-volatile memories.
- Scheduled techniques for data placement for large scale graph analytics (Apache Spark GraphX).

ICS–FORTH   *Heraklion, Greece*

Undergraduate Research Assistant   *Jan. 2017 - Aug. 2017*

- Study how graph partitioners dominate the performance of large scale graph analytics framewrorks using Apache Spark GraphX inventing some characterization metrics.

Education

University of Crete   *Heraklion, Greece*

M.Sc. in Computer Science   *Sep. 2017 - Present*

- **Area of Study:**
    - Parallel and Distributed Systems
    - Arhitecture of Microelectronic Systems
- **GPA (until now):** 9.43/10
- **Thesis Topic:** Expand memory address space for JVM-based large scale data analytics frameworks using fast storage devices (SSD, NVM)
- **Supervisors:** Angelos Bilas and Polyvios Pratikakis

University of Crete   *Heraklion, Greece*

B.Sc. in Computer Science   *Sep. 2011 - Jul. 2017*

- **GPA:** 7.62/10 – 3rd/20 in Graduation Ceremony
- **Thesis Topic:** Locality optimizations for distributed graph analytics computations
- **Supervisor:** Polyvios Pratikakis

Publications

Full Papers / Articles ....

Iacovos G. Kolokasis and Polyvios Pratikakis. Cut to Fit: Tailoring the Partitioning to the Computation. 2nd Joint International Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA), June 30-July 2019, Amsterdam, Netherlands

Technical Reports ....

Iacovos G. Kolokasis and Polyvios Pratikakis. Cut to Fit: Tailoring the Partitioning to the Computation. Technical Report 469, ICS – FORTH, Apr 2018

Financial Support

ICS–FORTH   *Heraklion, Greece*

Graduate Scholarship   *Apr. 2019 - May 2019*

SAP SE
Heidelberg, Germany

SCHOLARSHIP
Sep. 2018 - Sep. 2018

- Received a full scholarship from SAP SE to attend the 6th Heidelberg Laureate Forum

ICS–FORTH
Heraklion, Greece

GRADUATE SCHOLARSHIP
Marc. 2018 - Mar. 2019

- Undergraduate Scholarship supported by the European Commission under the H2020 Framework Programme through the EUROEXA(GA 754337) project

ICS–FORTH
Heraklion, Greece

UNDERGRADUATE SCHOLARSHIP
Jul. 2017 - Oct. 2017

- Undergraduate Scholarship supported by the European Commission under the H2020 Framework Programme through the EUROEXA(GA 754337) project

ICS–FORTH
Heraklion, Greece

UNDERGRADUATE SCHOLARSHIP
Sep. 2012 - Sep. 2013

- My second year at the university was supported fully by fellowships "Stelios Orphanoudakis"

Honors & Awards

| 2009 | **Finalist**, Programming contest organized by CYTA | Nicosia, Cyprus |

Attended Conferences, Workshops & Summer schools

Jul. 2019 **Alibaba Cloud Day,** Attend the conference — *Walldorf, Germany*

Jun. 2019 **GRADES-NDA,** Present paper: Cut to Fit: Tailoring the Partitioning to the Computation — *Amsterdam, Netherlands*

Oct. 2018 **CSW Autumn,** Attend the conference — *Heraklion, Greece*

Sept. 2018 6th **HLF,** Attend the conference — *Heidelberg, Germany*

Jul. 2018 14th **ACACES,** Participate and present my work during the one week summer school — *Fiuggi, Italy*

Jul. 2018 7th **YSC,** Attend the conference — *Heraklion, Greece*

Teaching Experience

Introduction to Computer Science (CS-100)
University of Crete

TEACHING ASSISTANT
Fall 2018

- **Professor:** Polyvios Pratikakis
- Assignments design with the professor and another TA
- Answering students quentions about the assignments
- Marking assignments submissions and examination scripts

Parallel Computing (CS-342)
University of Crete

TEACHING ASSISTANT
Spr. 2018, 2019

- **Professor:** Polyvios Pratikakis
- Hands on lecture about Performance and Evaluation on Parallel systems
- Hands on lecture about programming in Scala
- Marking project submissions and examination scripts
- Answering students quenstions

Data Structures (CS-240)
University of Crete

TEACHING ASSISTANT
Spr. 2018

- **Professor:** Panagiota Fatourou
- Project co-design with the professor and another TA
- Answering students quenstions about the project
- Marking project submissions and examination scripts

Digital Design (CS-120)
University of Crete

TEACHING ASSISTANT
Fall 2017

- **Professor:** Manolis G.H. Katevenis
- Rensponsible for two hour laboratories where undergraduate strudents learn the basics of digital design and implement a simple processor
- Marking assignments and examination scripts

Extracurricular Activity

Computer Science Department, University of Crete *Heraklion, Greece*
DEPUTY GRADUATE STUDENTS REPRESENTATIVE *Sep 2019 - Aug 2020*
- Take part in the monthly general assembly of the department, representing the graduate students

Graduate Students Association (GSA) CSD Board Council *Heraklion, Greece*
TREASURER *Feb 2018 - Present*
- Oversee the financial administration of the association, review procedures and financial reporting.
- Working closely with other members of the board council directing the major aspects of the assiciation's operations

Board Council of the Cypriot Students' Union *Heraklion, Greece*
PUBLIC RELATION OFFICER *May 2012 - May 2015*
- I was in charge of writing documents in a meeting, led sessions and organized events.

Program Committees

2019   **Member of Organization Committee**, 1st Graduate Students Conference *Heraklion, Greece*

Skills

Languages   English, Greek, French

References

Angelos Bilas *Heraklion, Greece*
PROFESSOR AT UNIVERSITY OF CRETE & ASSOCIATE RESEARCHER AT ICS–FORTH
bilas@ics.forth.gr

Polyvios Pratikakis *Heraklion, Greece*
PROFESSOR AT UNIVERSITY OF CRETE & ASSOCIATE RESEARCHER AT ICS–FORTH
polyvios@ics.forth.gr