

Polyvios Pratikakis

University of Crete CSD and FORTH-ICS, Heraklion, Greece
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CURRENT POSITIONS

Associate Professor, Computer Science Department, University of Crete

Collaborating Researcher, Institute of Computer Science, Foundation for Research and Technology–Hellas

EDUCATION

University of Maryland, College Park, Maryland. Ph.D. in Computer Science, 2008; M.Sc. in Computer Science, 2005.

National Technical University of Athens, Athens, Greece. Diploma of Electrical & Computer Engineering, 2003.

EMPLOYMENT

Associate Professor, Computer Science Department, University of Crete. *2022–Present.*

Collaborating Researcher, Institute of Computer Science, Foundation for Research and Technology–Hellas. *2017–Present.*

Assistant Professor, Computer Science Department, University of Crete. *2017–2022.*

Assistant Researcher, Institute of Computer Science, Foundation for Research and Technology–Hellas. *2014–2017.*

Collaborating Researcher, Institute of Computer Science, Foundation for Research and Technology–Hellas. *2010–2014.*

Guest Instructor, Computer Science Department, University of Crete, *2010–2014.*

Aircraftman, Hellenic Air Force, Mandatory Military Service, *2009–2010.*

Post-doctoral Researcher, Laboratoire VERIMAG, CNRS, Grenoble. *2008–2009.*

Research Intern, Microsoft Research, Redmond, Washington. *Summer 2006.*

Graduate Research Assistant, Department of Computer Science, University of Maryland. *2003–2008.*

System Administration, Library of Electrical & Computer Engineering, National Technical University of Athens. *2001–2002.*

Applications Programming, Library of Electrical & Computer Engineering, National Technical University of Athens. *2001–2002.*

Applications Programming, Freelance developer, Operations Research Time and Resource Planning Application. *2001–2003.*

PUBLICATIONS

1. **Discovery and classification of Twitter bots.** Shevtsov, Alexander, Maria Oikonomidou, Despoina Antonakaki, Polyvios Pratikakis, Alexandros Kanterakis, Paraskevi Fragopoulou, and Sotiris Ioannidis. *SN Computer Science* 3, no. 3 (2022): 1-29.
2. **Say Goodbye to Off-heap Caches! On-heap Caches Using Memory-Mapped I/O.** Iacovos G Kolokasis, Anastasios Papagiannis, Polyvios Pratikakis, Angelos Bilas, Foivos Zakkak. *12th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage)*, 2020.
3. **TwitterMancer: predicting user interactions on Twitter.** Konstantinos Sotiropoulos, John W Byers, Polyvios Pratikakis, Charalampos E Tsourakakis. *2019 57th Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, 2019.
4. **Cut to Fit: Tailoring the Partitioning to the Computation.** Iacovos G Kolokasis, Polyvios Pratikakis. *Proceedings of the 2nd Joint International Workshop on Graph Data Management Experiences & Systems and Network Data Analytics (GRADES-NDA)*, 2019.
5. **A greedy feature selection algorithm for Big Data of high dimensionality.** Ioannis Tsamardinos, Giorgos Borboudakis, Pavlos Katsogridakis, Polyvios Pratikakis, Vassilis Christophides. *Machine Learning*, 108.2 (2019): 149-202.

6. **Social media analysis during political turbulence.** Despoina Antonakaki, Dimitris Spiliotopoulos, Polyvios Pratikakis, Sotiris Ioannidis, Paraskevi Fragopoulou. **PloS one**. 2017 Oct 31;12(10).
7. **Execution of Recursive Queries in Apache Spark.** Pavlos Katsogridakis, Sofia Papagiannaki, Polyvios Pratikakis. European Conference on Parallel Processing, (**EuroPar**), August, 2017.
8. **Building a Java™ Virtual Machine for Non-Cache-Coherent Many-core Architectures.** Foivos S Zakkak, Polyvios Pratikakis. Proceedings of the 14th International Workshop on Java Technologies for Real-Time and Embedded Systems (**JTRES**), August 2016.
9. **DiSquawk: 512 cores, 512 memories, 1 JVM.** Foivos S. Zakkak, Polyvios Pratikakis Proceedings of the 13th International Conference on Principles and Practices of Programming on the Java Platform: Virtual Machines, Languages, and Tools (**PPPJ**), August 2016.
10. **Hierarchical Parallel Dynamic Dependence Analysis for Recursively Task-Parallel Programs.** Nikolaos Papakonstantinou, Foivos S. Zakkak, Polyvios Pratikakis. IEEE International Parallel and Distributed Processing Symposium (**IPDPS**), May 2016.
11. **TProf: An energy profiler for task-parallel programs.** Ioannis Manousakis, Foivos S. Zakkak, Polyvios Pratikakis, Dimitrios S. Nikolopoulos. Sustainable Computing: Informatics and Systems (**SUSCOM**), March 2015.
12. **Distributed region-based memory allocation and synchronization.** Christi Symeonidou, Polyvios Pratikakis, Dimitrios S. Nikolopoulos, Angelos Bilas. International Journal of High Performance Computing Applications (**IJHPCA**), November 2014.
13. **JDMM: a java memory model for non-cache-coherent memory architectures.** Foivos S. Zakkak, Polyvios Pratikakis. International Symposium on Memory Management (**ISMM**), June 2014.
14. **Micro-checkpointing in fault tolerant runtimes.** Pavlos Katsogridakis, Polyvios Pratikakis. Proceedings of the 11th ACM Conference on Computing Frontiers (**CF**), May 2014.
15. **DRASync: Distributed Region-based memory Allocation and Synchronization.** Christi Symeonidou, Polyvios Pratikakis, Dimitrios S. Nikolopoulos, Angelos Bilas. European MPI Users' Group Meeting (**EuroMPI**), September 2013.
16. **Inference and Declaration of Independence in Task-Parallel Programs.** Foivos S. Zakkak, Dimitrios Chasapis, Polyvios Pratikakis, Angelos Bilas, Dimitrios S. Nikolopoulos. International Conference on Advanced Parallel Processing Technology (**APPT**), August 2013.
17. **BDDT: Block-level Dynamic Dependence Analysis for Task-Based Parallelism.** George Tzenakis, Angelos Papatriantafyllou, Hans Vandierendonck, Polyvios Pratikakis, Dimitrios S. Nikolopoulos International Conference on Advanced Parallel Processing Technology (**APPT**), August 2013.
18. **Efficient Runtime Support for Embedded MPSoCs.** Dimitris Theodoropoulos, Polyvios Pratikakis, Dionisios Pnevmatikatos. International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation (**ICSAMOS**), July 2013.
19. **Practical Information Flow for Legacy Web Applications.** Georgios Chinis, Polyvios Pratikakis, Elias Athanasopoulos, Sotiris Ioannidis. International Workshop on Implementation, Compilation, Optimization of Object-Oriented Languages, Programs and Systems (**ICOOOLPS**), July 2013.
20. **Towards Reliable Task Parallel Programs.** Dimitrios Skarlatos, Polyvios Pratikakis, Dionisios Pnevmatikatos. Workshop on Design for Reliability (**DFR**), January 2013.
21. **The Myrmics Memory Allocator: Hierarchical, Message-Passing Allocation for Global Address Spaces.** Spyros Lyberis, Polyvios Pratikakis, Dimitrios S. Nikolopoulos, Martin Schulz, Todd Gamblin, Bronis de Supinski. International Symposium on Memory Management (**ISMM**), June 2012.
22. **A Programming Model For Deterministic Task Parallelism.** Polyvios Pratikakis, Hans Vandierendonck, Spyros Lyberis, Dimitrios S. Nikolopoulos. Memory Systems Performance and Correctness (**MSPC**), June 2011.
23. **Parallel Programming of General-Purpose Programs Using Task-Based Programming Models.** Hans Vandierendonck, Polyvios Pratikakis, Dimitrios S. Nikolopoulos. Hot Topics in Parallelism (**HotPar**), May 2011.
24. **LOCKSMITH: Practical static race detection for C.** Polyvios Pratikakis, Jeffrey S. Foster and Michael Hicks. Transactions On Programming Languages And Systems (**TOPLAS**), January 2011.
25. **Formalizing Soundness of Contextual Effects.** Polyvios Pratikakis, Jeffrey S. Foster, Michael Hicks,

Iulian Neamtiu. Theorem Proving in Higher Order Logics (TPHOLs), August 2008.

26. **Type-Preserving Compilation for Realistic Object-Oriented Compilers.** Juan Chen, Chris Hawblitzel, Frances Perry, Mike Emmi, Jeremy Condit, Derrick Coetzee, Polyvios Pratikakis. Programming Language Design and Implementation (PLDI), June 2008.
27. **Contextual Effects for Version-Consistent Dynamic Software Updating and Safe Concurrent Programming.** Iulian Neamtiu, Michael Hicks, Jeffrey S. Foster, Polyvios Pratikakis. Principles of Programming Languages (POPL), January 2008.
28. **Existential Label Flow Inference via CFL Reachability.** Polyvios Pratikakis, Jeffrey S. Foster, Michael Hicks. Static Analysis Symposium (SAS), August 2006.
29. **Lock Inference for Atomic Sections.** Michael Hicks, Jeffrey S. Foster, Polyvios Pratikakis. Workshop on Languages, Compilers, and Hardware Support for Transactional Computing (TRANSACT), June 2006.
30. **Context-sensitive Correlation Analysis for Detecting Races.** Polyvios Pratikakis, Michael Hicks, Jeffrey S. Foster. Programming Language Design and Implementation (PLDI), June 2006.
31. **Transparent Proxies for Java Futures.** Polyvios Pratikakis, Jaime Spacco, Michael Hicks. Object-Oriented Programming Languages, Systems, and Applications (OOPSLA), October 2004.

POSTERS, ABSTRACTS

32. **Say Goodbye to Off-heap Caches! On-heap Caches Using Memory-Mapped I/O.** Iacovos G Kolokasis, Anastasios Papagiannis, Polyvios Pratikakis, Angelos Bilas, Foivos Zakkak. In Spark Summit 2020.
33. **Mining Celebrity Endorsement Perceptions Using Varieties of Twitter Account Automated Data.** Maria Oikonomidou, Polyvios Pratikakis, Charalampos Saridakis, Sofia Angelidou. In womENCourage 2019.
34. **Discovery and classification of Twitter bots.** Maria Oikonomidou, Alexander Shevtsov, Despoina Antonakaki, Polyvios Pratikakis. In womENCourage 2019.
35. **Benchmarking of map-reduce execution engines.** Pavlos Katsogridakis and Polyvios Pratikakis. In ACACES 2014, Poster presentation.
36. **Inference and Declaration of Independence: Impact on Deterministic Task Parallelism.** Foivos S. Zakkak, Dimitrios Chasapis, Polyvios Pratikakis, Dimitrios S. Nikolopoulos, Angelos Bilas. International Conference on Parallel Architectures and Compilation Techniques (PACT), Poster abstract, September 2012.
37. **BDT: Block-level Dynamic Dependence Analysis for Deterministic Task-based Parallelism.** George Tzenakis, Angelos Papatriantafyllou, John Kesapides, Polyvios Pratikakis, Hans Vandierendonck, Dimitrios S. Nikolopoulos. Principles and Practice of Parallel Programming (PPoPP), Poster abstract, February 2012.
38. **C source level transformations & optimizations for task-based parallelism.** Foivos S. Zakkak, Dimitrios Chasapis, Polyvios Pratikakis, Dimitrios S. Nikolopoulos and Angelos Bilas. International Symposium on Code Generation and Optimization (CGO), Poster presentation, April 2011.

TECHNICAL REPORTS

39. **The Tweeting Salesperson Problem: Ranking Celebrity Endorsements using Twitter Multi-Layer Similarity.** Maria Oikonomidou, Polyvios Pratikakis, Charalampos Saridakis, Sofia Angelidou. At arXiv preprint arXiv:TBD, 2022.
40. **Analysis of Twitter and YouTube during USelections 2020.** Alexander Shevtsov, Maria Oikonomidou, Despoina Antonakaki, Polyvios Pratikakis, Sotiris Ioannidis. At arXiv preprint arXiv:2010.08183, 2020.
41. **Discovery and classification of Twitter bots.** Alexander Shevtsov, Maria Oikonomidou, Despoina Antonakaki, Polyvios Pratikakis, Alexandros Kanterakis, Sotiris Ioannidis, Paraskevi Fragopoulou. At arXiv preprint arXiv:2010.15393, 2020.
42. **twAwler: A lightweight twitter crawler** Polyvios Pratikakis. At arXiv preprint arXiv:1804.07748, 2018.
43. **Massively-Parallel Feature Selection for Big Data.** Tsamardinos, Ioannis, Giorgos Borboudakis, Pavlos Katsogridakis, Polyvios Pratikakis, and Vassilis Christophides, Technical Report, 2017.
44. **Myrmics: Scalable, Dependency-aware Task Scheduling on Heterogeneous Manycores** Spyros Lyberis, Polyvios Pratikakis, Iakovos Mavroidis, Dimitrios S. Nikolopoulos. At arXiv preprint arXiv:1606.04282. ©2013, released 2016.

45. **BDDT-SCC: A Task-parallel Runtime for Non Cache-Coherent Multicores** Alexandros Labrineas, Polyvios Pratikakis, Dimitrios S Nikolopoulos, Angelos Bilas. At arXiv preprint arXiv:1606.04288, ©2013, released 2016.
46. **BDDT: Block-level Dynamic Dependence Analysis for Deterministic Task-Based Parallelism.** George Tzenakis, Angelos Papatriantafyllou, Foivos S. Zakkak, Hans Vandierendonck, Polyvios Pratikakis, Dimitrios S. Nikolopoulos. FORTH Technical Report, 2012.
47. **Practical Information Flow for Legacy Web Applications.** Georgios Chinis, Polyvios Pratikakis, Elias Athanasopoulos, Sotiris Ioannidis, FORTH Technical Report, 2012.
48. **Contextual Effects for Version-Consistent Dynamic Software Updating and Safe Concurrent Programming.** Iulian Neamtiu, Michael Hicks, Jeffrey S. Foster, Polyvios Pratikakis, UMD Technical Report, 2007.
49. **Context-sensitive Correlation Analysis for Detecting Races.** Polyvios Pratikakis, Jeffrey S. Foster, Michael Hicks, UMD Technical Report, 2006.
50. **Existential Label Flow Inference via CFL Reachability.** Polyvios Pratikakis, Michael Hicks, Jeffrey S. Foster, UMD Technical Report, 2005.
51. **Transparent Proxies for Java Futures.** Polyvios Pratikakis, Jaime Spacco, Michael Hicks, UMD Technical Report, 2004.

DISSERTATIONS AND BOOKS

52. **Parallel Programming.** Hans Vandierendonck, Dimitrios S. Nikolopoulos, Polyvios Pratikakis. Encyclopedia of Software Engineering, January 2013.
53. **Sound, precise and efficient static race detection for multi-threaded programs.** Ph.D. Dissertation, University of Maryland, 2008.
54. **Transparent proxies for Java futures.** M.Sc. Thesis, University of Maryland, 2004.
55. **Automatic parallelization of nested loops.** Diploma Thesis (in Greek), National Technical University of Athens, 2002.

OTHER TALKS, TUTORIALS, REPORT PRESENTATIONS

- **Driving Parallelization Optimizations with Static Analysis.** YSC conference, virtual, 2020. Keynote.
- **Graph Analytics with Spark.** YSC conference, Heraklion, 2019. Keynote.
- **Reasons to pursue a PhD!** HiPEAC Computing Systems Week session on Inspiring Futures: The HiPEAC Career Advise & Mentoring session (HiPEAC CSW), October 2018.
- **Task-Parallel programming models.** YSC conference, Heraklion, 2018. Keynote.
- **The Formic Architecture and the Myrmics Runtime System.** ENCORE & PEPPIER Workshop on Programmability and Portability for Emerging Architectures (EPOPPEA'13), January 2013.
- **Distributed Region-Based Memory Management.** University of Maryland, College Park, Maryland, August 2012.
- **Understanding scalability and performance requirements of I/O intensive applications on future multicore servers.** International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS'12), August 2012.
- **Inference and Declaration of Independence.** SoftLab Programming Languages Seminar, National Technical University of Athens, Greece, December 2011.
- **A Programming Model for Deterministic Task Parallelism.** University of Maryland, College Park, Maryland, June 2011.
- **Trends in Computer Science Education.** Task Force on Education, HiPEAC 2011 Cluster Meetings, Chamonix, France, April 2011.
- **Extending L2CA for the verification of multi-threaded programs.** Laboratoire LIAFA, UNIVERSITE Paris Diderot - Paris7, May 2009.
- **Context-sensitive Correlation Analysis for Detecting Races.** Department of Computer Science, Aristotle University of Thessaloniki & Foundation for Research and Technology–Hellas (FORTH), Irakleio & Department of Computer Science, Athens University of Economics and Business, March 2008.

- **Formalizing Soundness of Contextual Effects.** SoftLab, Department of Electrical and Computer Engineering, National Technical University of Athens, March 2008.
- **Finding Data Races in C programs using Static Analysis.** Dean's Lecture Seminar, Department of Computer Science, University of Maryland, College Park, September 2007.
- **Context-sensitive Correlation Analysis for Detecting Races.** SoftLab Programming Languages Seminar, National Technical University of Athens, Greece, December 2006.
- **Locksmith: Finding Data Races in C programs using Static Analysis.** Maryland Software Day, University of Maryland, College Park, November 2006.

SOFTWARE

- **twAowler** (2018)
<https://github.com/polyvios/twAowler>
 A lightweight twitter crawler and social network analytics suite.
- **wiktionary-parser** (2016)
<https://github.com/polyvios/el-wiktionary-parser>
 An interpreter for the domain-specific language used in wiktionary and wikipedia to create conjugation tables for greek words.
- **ParTEE** (2015)
<https://github.com/CARV-ICS-FORTH/partee>
 An OpenMP runtime with support for fully recursive tasks with automatic dependency detection and resolution.
- **SCOOP** (2013)
<http://www.ics.forth.gr/carv/downloads.html>
 A static analysis and rewriting compiler that adds parallel tasks to C programs.
- **Locksmith** (2006)
<http://www.cs.umd.edu/projects/PL/locksmith/>
 A static analysis tool for finding races in C programs.
- **ProxyC** (2004)
<http://www.cs.umd.edu/polyvios/proxyc/>
 A compiler that supports Java with asynchronous method calls and transparent futures.
- **Librarian II** (2001)
 Available from <http://www.lib.ece.ntua.gr>
 A library management program used in the Department Library in the National Technical University of Athens.

SERVICE

Reviewer

OOPSLA 2007, ECOOP 2008, ISMM 2008, CCS 2008, POPL 2009, VMCAI 2009, ESOP 2009, TASE 2009, CAV 2009, TLDI 2009, FM 2009, TACAS 2009, VMCAI 2010, IPDPS 2010, POPL 2010, TOPLAS 2010, TOSEM 2011, CF 2011, ESOP 2011, POPL 2011, VMCAI 2011, EUROPAR 2011, EUROPAR 2012, RAID 2012, ICPP 2012, CCS 2012, JPDC 2012, ECOOP 2013, ICALP 2013, PODC 2013, EUROPAR 2013, TACO 2013, ISMM 2014, TOSEM 2016, DISC 2016, TACO 2016, MULTIPROG 2016, TACO 2017, TMSCS 2018, SocInfo 2019, SocInfo 2020, SummerSOC 2021, TACO 2021, EuroPar 2022, SocInfo 2022.

Committee Member

ISMM 2014, MULTIPROG 2016, EUROPAR 2017, YSC2018, YSC2019, YSC2020, YSC2021, CF2021.

Incoming student mentor

University of Maryland, 2004, 2007.

Co-organizer

EuroEXA project workshop, 2019. FOSSCOMM 2018, Chair.

HiPEAC Computing Systems Week, Heraklion, Greece, 2018.

Young Scientists Conference, FORTH-ICS, Heraklion, Greece, 2018, 2019, 2020.

Thematic Session on Analytics Execution Engines, HiPEAC Computing Systems Week, Athens, Greece, 2014.

Thematic Session on Parallel and Concurrent Programming Models, HiPEAC Computing Systems Week,

Ghent, Belgium, 2012.

Task Force on Education, HiPEAC 2011 Cluster Meetings, Chamonix, France, 2011.

Faculty Service

Undergraduate credit transfer committee: 2017, 2018, 2019, 2020.

Graduate credit transfer committee: 2019, 2020, 2021, 2022.

Director of Graduate Studies: 2020, 2021, 2022.

Substitute member of the Committee of the Special Account for Research Funding of the University of Crete: 2020, 2021, 2022.

Substitute representative of the University of Crete in the ELLAK organization: 2019, 2020, 2021, 2022.

AWARDS, DISTINCTIONS, GRANTS

Principal Investigator for FORTH, for project AERO, awarded Horizon Europe funding.

Work Package leader for project “DiPET”, awarded CHIST-ERA funding.

Work Package leader for project “ETAK”, awarded national funding.

Work Package leader for 508 Person-Month work package on “System Software” of project “EuroEXA”.

Coordinator of “ASAP” project proposal, awarded EU Funding in 2013, awarded grade “Excellent” by EC.

Coauthor of “GreenVM” project proposal, awarded Greek National Funding in 2012.

University of Maryland Dean’s Fellowship award for student research, 2007–2008.

Department of Computer Science Fellowship, University of Maryland, 2002–2004.

TEACHING EXPERIENCE

Instructor, University of Crete

CS-500: Introduction to Research (2 lectures)	Spring 2022
CS-342: Introduction to Parallel Programming (44 students)	Spring 2022
CS-100: Introduction to Computer Science (379 students)	Fall 2021
CS-546: Types and Programming Languages (14 students)	Fall 2021
CS-500: Introduction to Research (2 lectures)	Fall 2021
CS-500: Introduction to Research (2 lectures)	Spring 2021
CS-342: Introduction to Parallel Programming (92 students)	Spring 2021
CS-500: Introduction to Research (2 lectures)	Fall 2020
CS-546: Types and Programming Languages (9 students)	Fall 2020
CS-100: Introduction to Computer Science (325 students)	Fall 2020
CS-500: Introduction to Research (2 lectures)	Spring 2020
CS-342: Introduction to Parallel Programming (91 students)	Spring 2020
CS-500: Introduction to Research (2 lectures)	Fall 2019
CS-546: Types and Programming Languages (15 students)	Fall 2019
CS-100: Introduction to Computer Science (398 students)	Fall 2019
CS-342: Introduction to Parallel Programming (25 students)	Spring 2019
CS-546: Types and Programming Languages (11 students)	Fall 2018
CS-100: Introduction to Computer Science (424 students)	Fall 2018
CS-342: Introduction to Parallel Programming (44 students)	Spring 2018
CS-100: Introduction to Computer Science (376 students)	Fall 2017
CS-529: Multicore Processor Programming (7 students)	Spring 2017
CS-100: Introduction to Computer Science (357 students)	Fall 2016
CS-100: Introduction to Computer Science (356 students)	Fall 2015
CS-490.40: Type Systems and Static Analysis (6 students)	Fall 2014
CS-100: Introduction to Computer Science (377 students)	Fall 2014
CS-590.29: Multicore Processor Programming (9 students)	Spring 2014
CS-100: Introduction to Computer Science (369 students)	Fall 2013
CS-490.40: Type Systems and Static Analysis (6 students)	Fall 2013
CS-529: Multicore Processor Programming (10 students)	Spring 2013
CS-100: Introduction to Computer Science (339 students)	Fall 2012
CS-490.40: Type Systems and Static Analysis (5 students)	Fall 2012

CS-100: Introduction to Computer Science (256 students)	Fall 2011
CS-490.40: Type Systems and Static Analysis (10 students)	Fall 2011
CS-490.40: Type Systems and Static Analysis (9 students)	Fall 2010

Course Development

CS-500: Introduction to Research. Course introductory material (first 2 lectures) for University of Crete graduate programme. Taught every semester.

CS-342: Introduction to Parallel Programming. Course designed for University of Crete undergraduate programme.

CS-546: Types and Programming Languages. Course adapted from CS-490.40 as an advanced graduate course for University of Crete graduate programme.

CS-490.40: Type Systems and Static Analysis. Course designed for University of Crete undergraduate programme.

CS-100: Introduction to Computer Science. Redesigned course for first semester based on previous version for second semester, for University of Crete undergraduate programme.

CS-529: Multicore Processor Programming. Adapted previous version of course material, for University of Crete graduate programme.

CS-590.29: Multicore Processor Programming. Half-credit course adapted for managed and functional languages for University of Crete graduate programme.

Guest Lecturer

CS-590.29: Multicore Processor Programming, University of Crete	Spring 2011
CS-529: Multicore Processor Programming, University of Crete	Spring 2010
CS-556: Distributed Systems, University of Crete	Spring 2010
Logic and Automata Theory, Laboratoire Verimag	Spring 2009
CMSC631: Program Analysis and Understanding, University of Maryland	Spring 2007
CMSC631: Program Analysis and Understanding, University of Maryland	Fall 2006

Graduate Teaching Assistant

CMSC424: Database Design, University of Maryland	Spring 2003
CMSC424: Database Design, University of Maryland	Fall 2002

STUDENT SUPERVISION

- Manos Anagnostakis:
Diploma thesis on the Parallel-Scavenge Java Garbage Collector: 2020–2021. M.Sc. on Java Memory Management: 2021–Now.
- Maria Charalambous:
Diploma thesis on the G1 Java Garbage Collector: 2020–2021. M.Sc. on Java Memory Management: 2021–Now.
- Eva Perontsi:
M.Sc. on Deep Learning for Social Network Analytics: 2020–2022.
- Alex Shevtsov:
M.Sc. on Social Network Analytics for Bot Detection: 2017–2018⁴
. Ph.D. on Social Network Analytics: 2018–Now⁴.
- Iakovos Kolokasis:
Diploma thesis on Graph Analytics: 2016–2017
M.Sc. on Language Runtimes for Big Data Analytics: 2017–2020³
Ph.D. on Language Runtimes and Memory Systems : 2020–Now³
- Ioannis Melidonis:
Diploma thesis on Static Analysis for Rust: 2021–Now
- Michail Nikoloudakis:
Diploma thesis on FORTRAN MPI support for Uniform Distributed Memory DMA: 2018–2019

- M.Sc. on MPI implementations for write-based DMA accelerated networks: 2019–2022
- Georgios Gournianakis:
Diploma thesis on Static Analysis: 2021–2022
 - Georgios Mitsos:
Diploma thesis on Graph Analytics: 2021–2022
 - Dimitrios Bakalios:
Diploma thesis on Shenandoah Garbage Collector: 2020–2022⁵
 - Aris Zagakos:
Diploma thesis on Streaming Social Network Analytics: 2020–2021.
 - Stefanos Pleros:
Diploma thesis on Streaming Social Network Analytics: 2020–2021.
 - Myron Tsatsarakis:
M.Sc. on Parallelization of a structural stability simulation application: 2020–2022.
 - Manos Giortamis:
M.Sc. on Integration of a container-based distributed structural stability simulation application: 2020–2021.
 - Maria Oiconomidou:
Diploma thesis on Social Network Analytics: 2017–2018
M.Sc. on Social Network Analytics: 2020–2022
 - Evangelos Karagiannakis:
Diploma thesis on LLVM: 2020–2022
 - Manos Eleftheriou:
Diploma thesis on Static Analysis with Infer: 2020–2021.
 - Giorgos Pyrros:
Diploma thesis on Streaming Graph Processing: 2019–2020.
 - Michael Raptakis:
Diploma thesis on Social Network Analytics: 2020–2021
 - Evangelia Skouloudi:
Diploma thesis on Social Network Analytics: 2020–2021
 - Dimitris Vogiatzidakis:
Diploma thesis on Graph Processing: 2019–2020
 - Laertis Diakakis:
Diploma thesis on Fault-tolerance in Task Parallel Runtimes: 2020
 - Giorgos Papoutsis:
Diploma thesis on Graph Feature Extraction: 2019
 - Xenia Ragiadakou:
Diploma thesis on Linux Kernel self-extraction on the RISC-V ISA: 2019
 - Giannis Probonas:
Diploma thesis on Benchmarking Uniform Distributed Memory with HPC Applications: 2018
 - Giorgos Kritikakis:
Diploma thesis on Compiler Support for PARTEE on Uniform Distributed Memory: 2018–2019
 - Katerina Katsani:
Diploma thesis on Epidemiological analysis of Online Social Networks: 2018–2019
 - Alexander Garcarz:
Diploma thesis on Linux Kernel Memory Management: 2017–2018
 - Ioannis Epanomeritakis:
Diploma thesis on Static Analysis: 2017–2018
 - Pavlos Katsogridakis:
Diploma thesis on Task-Parallel Fault Tolerance: 2014¹
M.Sc. on Spark Analytics Scheduler: 2014–2017¹

- Foivos S. Zakkak:
M.Sc. on Compilation and Static Analysis for Task Parallelism: 2010–2012^{2,3}
Ph.D. 2012–2016³
- Irimi Stavrakantonaki:
Diploma thesis on Visualization of Points-to Information: 2013-2014³
M.Sc. on Points-to Analysis in LLVM: 2014–2016³
- Nikos Papakonstantinou:
Diploma thesis on Profiling Task-Parallelism: 2012-2013³, M.Sc. on OpenMP Task Parallel Runtime Development: 2013–2016³
- Rafail Troulakis:
Diploma thesis on Task-Parallel Optimizations in LLVM: 2014–2015
- Apostolos Glenis:
M.Sc. on Distributed Systems Fault-Tolerance: 2013–2015¹
- Ioannis Manousakis:
M.Sc. on Energy Profiling of Task Parallel Loads: 2013–2015²
- Georgios Chinis:
M.Sc. on Dynamic Information Flow in the PHP Interpreter: 2012-2013⁴
- Evangelos Kafentarakis:
M.Sc. on Performance Profiler for Task Parallel Applications: 2012–2013²
- Christi Symeonidou:
Diploma thesis on Memory Management: 2010-2011^{2,3}
M.Sc. on Distributed Memory Allocator for MPI: 2011–2013^{2,3}
- Alexandros Labrineas:
Diploma thesis on Task-Parallel Schedulers: 2011²
M.Sc. on Task-Parallel Runtimes for the Intel SCC processor: 2011–2013^{2,3}
- Dimitrios Chasapis:
Diploma thesis on source-to-source compilation of high-level task parallelism: 2010-2011²
M.Sc. on Static Analysis of OpenMP programs: 2011-2012^{2,3}
- Dimitrios Skarlatos:
Internship on Fault-tolerance in Task Parallelism: Summer 2012

¹: Co-advised with Manolis Katevenis.

²: Co-advised with Dimitrios Nikolopoulos.

³: Co-advised with Angelos Bilas.

⁴: Co-advised with Sotiris Ioannidis.

⁵: Co-advised with Foivos Zakkak.

REFERENCES

Manolis Katevenis

Professor

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Dimitrios S. Nikolopoulos

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2214 Knowledge Works II, 2202 Kraft Drive

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Angelos Bilas

Professor

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FORTH-ICS, Heraklion, Crete, GR-70013

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Hans Vandierendonck

Associate Professor

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