### Personal Details

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#### <u>Studies</u>

- BSc in Applied Informatics, University of Macedonia
- PhD in Applied Informatics, University of Macedonia

#### **Employment - Research Experience**

#### Faculty

- Since 08/2019, Associate Professor of Computational Methods, Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 07/2014 08/2019, Assistant Professor of Computational Methods, Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 06/2013 07/2014, Lecturer of Computational Methods, Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 01/2011 06/2013, Lecturer of Computational Methods, Department of Balkan, Studies, University of Western Macedonia

### Adjunct Lecturer

- 10/2007 08/2009, Adjunct Lecturer, Department of Technology Management, University of Macedonia
- 10/2004 08/2006, Adjunct Lecturer, Department of Applied Informatics, University of Macedonia

### Other Employment

• 09/2004 - 01/2011, High-school teacher of informatics in the public secondary education

### Participation in Research Programs

- Researcher (with contract) in the project of Macedonia FOSS Unit of Excellence, "Business and Educational applications/services for business"
- Researcher (with contract) in the project "Support of Computer Science Studies", in the Department of Applied Informatics, University of Macedonia
- Researcher (with contract) in the project "HellasGrid Design and Development of Pilot Infrastructure and Advanced Services Grid Computing Systems"

## **Teaching Experience**

#### Teaching of Undergraduate Courses

- 2021 now: Informatics, Technology and Society, Quantitative Methods for Social Sciences: Statistics using Computers, Topics in Computer Science, E-Business, Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 2014 2021: Statistics using Computers, Computer Science Principles, Topics in Computer Science, E-Business, Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 2015 2016, 2018 2019: *Mathematical Economics*, Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 2009 2014: *Quantitative Methods I and II, Econometrics, Informatics I, Computer Applications in Business* and *Internet and Web,* Department of Balkan Studies, University of Western Macedonia and Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 2007 2009: Architectures of Distributed Systems, Applications of Distributed Systems, Embedded Systems, Distributed Systems and Web Technologies, Department of Technology Management, University of Macedonia
- 2004 2006: *Systems Administration and Programming I and II,* Department of Applied Informatics, University of Macedonia

#### Teaching of Graduate Courses

- 2015 now: *Space and Cultural Management in the Balkans and SE Europe,* Department of Balkan, Slavic and Oriental Studies, University of Macedonia
- 2009 2013: *Research Methodology* and *Computer Applications in Social Sciences Research,* Department of Balkan Studies, University of Western Macedonia

### Other Teaching

- 2020 now, Intercultural Education: Approaching Multiculturalism in the Educational System, Training and Lifelong Learning Center, University of Macedonia
- 2018 now, *Information and Communications Technology (ICT) in Education,* Department of Balkan, Slavic and Oriental Studies, University of Macedonia

#### Supervision of Thesis and Dissertations

- Supervisor of 3 dissertations at the Department of BSOS, Univ. of Macedonia
- Member of a three-member advisory committee and a seven-member examination committee of a doctoral dissertation in the department of BSOS, Univ. Of Macedonia

### **Scientific Activity**

**Memberships**: IEEE (Institute of Electrical and Electronics Engineers, Computer Society), IEEE TFCC (Task Force on Cluster Computing), CMStatistics - Computational and Methodological Statistics, Specialized team: Matrix Computations and Statistics **Reviewer**: (IEEE Transactions on Parallel and Distributed Systems, Journal of Parallel and Distributed Computing, Pattern Recognition, International Journal of Computational Intelligence and Applications, Journal of Supercomputing, Journal of Multivariate Analysis, Journal of Computational Methods in Sciences and Engineering, Mathematics, etc)

## Program Committee Member: (PARENG, EMERGING, etc)

# <u>Citations</u>

Google Scholar Citations: <u>http://scholar.google.com/citations?user=IN7NfscAAAAJ&hl=en</u>

Scopus: <a href="https://www.scopus.com/authid/detail.uri?authorId=6603144382">https://www.scopus.com/authid/detail.uri?authorId=6603144382</a>

## Scientific Publications

## Books

• D. Ioannides , P. D. Michailidis, Quantitative Methods in Social-Economic Sciences, Tziolas Publications, 2021 (in Greek).

## **Book Chapters**

- P.D. Michailidis and K.G. Margaritis, Text Searching on a Heterogeneous Cluster of Workstations, in Proceedings of the 8th Euro PVM/MPI 2001 Conference (PVM-MPI'2001), Lecture Notes in Computer Science 2131, Santorini, Greece, pp. 378-385, Springer-Verlag, 2001.
- P.D. Michailidis and K.G. Margaritis, A Performance Study of Load Balancing Strategies for Approximate String Matching on an MPI Heterogeneous System Environment, in Proceedings of the 9th Euro PVM/MPI 2002 Conference (PVM-MPI'2002), Lecture Notes in Computer Science 2474, Linz, Austria, pp. 432-440, Springer-Verlag, 2002.
- P.D. Michailidis and K.G. Margaritis, Performance Analysis of Approximate String Searching Implementations for Heterogeneous Computing Platform, in Proceedings of the 10th Euro PVM/MPI 2003 Conference (PVM-MPI'2003), Lecture Notes in Computer Science, Venice, Italy, pp. 242-246, Springer-Verlag, 2003.
- P.D. Michailidis, V. Stefanidis and K.G. Margaritis, Performance Analysis of Overheads for Matrix Vector Multiplication in Cluster Environment, in Proceedings of the 10th Panhellenic Conference on Informatics (PCI'2005), Lecture Notes in Computer Science 3746, Volos, Greece, pp. 245-255, Springer-Verlag, 2005.
- P.D. Michailidis and K.G. Margaritis, Parallel and Distributed Computational Methods for Flexible Text Searching, in book "Supercomputing Research Advances", Yongge Huáng (eds.), Ch. 2, pp. 61 – 112, Nova Science Publishers, 2008.
- C. Kouzinopoulos, P.D. Michailidis and K.G. Margaritis, Parallel Processing of Multiple Pattern Matching Algorithms for Biological Sequences: Methods and Performance Results, in book "Bioinformatics - Computational Biology and Modeling", Ning-Sun Yang (eds.), Ch. 8, pp. 161 - 182, Intech - Open Access Publisher, 2011.

# International Journals

• P.D. Michailidis and K.G. Margaritis, On-line String Matching Algorithms: Survey and Experimental Results, International Journal of Computer Mathematics, vol. 76, no. 4, pp. 411-434, 2001.

- P.D. Michailidis and K.G. Margaritis, On-line Approximate String Searching Algorithms: Survey and Experimental Results, International Journal of Computer Mathematics, vol. 79, no. 8, pp. 867-888, 2002.
- P.D. Michailidis and K.G. Margaritis, Parallel Implementations for String Matching Problem on a Cluster of Distributed Workstations, Neural, Parallel and Scientific Computations, vol. 10, pp. 287-312, 2002.
- P.D. Michailidis and K.G. Margaritis, Performance Evaluation of Load Balancing Strategies for Approximate String Matching Application on an MPI Cluster of Heterogeneous Workstations, Future Generation Computer Systems, vol. 19, no. 7, pp. 1075-1104, Elsevier-Science, 2003.
- P.D. Michailidis and K.G. Margaritis, Parallel Flexible Text Searching Applications on a Heterogeneous Cluster Architecture, International Journal of Computational Science and Engineering, vol. 1, no. 1, pp. 45-59, Inderscience Publishers, 2005.
- P.D. Michailidis and K.G. Margaritis, New Processor Array Architectures for the Longest Common Subsequence Problem, The Journal of Supercomputing, vol. 32, no. 1, pp. 51-69, Springer Science + Business Media, 2005.
- P.D. Michailidis, T. Typou, V. Stefanidis and K.G. Margaritis, Performance Models for Matrix Computations on Networks of Heterogeneous Workstations, Neural, Parallel and Scientific Computations, vol. 14, no. 2/3, pp. 177 – 204, 2006.
- V.K. Stefanidis, P.D. Michailidis and K.G. Margaritis, An improved performance prediction model for matrix-vector multiplication on clusters of workstations, HERMIS: The International Journal of Computer Mathematics and its Applications, vol. 8, pp. 77-83, 2007.
- P.D. Michailidis and K.G. Margaritis, A Programmable Array Processor Architecture for Flexible Approximate String Matching Algorithms, Journal of Parallel and Distributed Computing, vol. 67, no. 2, pp. 131-141, Elsevier-Science, 2007.
- P.D. Michailidis and K.G. Margaritis, Processor Array Architectures for Flexible Approximate String Matching, Journal of Systems Architecture, vol. 54, no. 1-2, pp. 35-54, Elsevier-Science, 2008.
- P.D. Michailidis and K.G. Margaritis, Parallel Direct Methods for Solving System of Linear Equations with Pipelining on a MultiCore using OpenMP, Journal of Computational and Applied Mathematics, vol. 236, no. 3, pp. 326-341, Elsevier-Science, 2011.
- P.D. Michailidis and K.G. Margaritis, Computing Dot Product on Heterogeneous Master – Worker Platforms, International Journal of Pure and Applied Mathematics, vol. 84, no. 1, pp. 115 – 140, Academic Publications Ltd., 2013.
- P.D. Michailidis and K.G. Margaritis, Accelerating Kernel Density Estimation on the GPU using the CUDA framework, Applied Mathematical Sciences, vol. 7, no. 30, pp. 1447 1476, Hikari Ltd., 2013.
- C.S. Kouzinopoulos, P.D. Michailidis and K.G. Margaritis, Multiple String Matching on a GPU using CUDA, Scalable Computing: Practice and Experience, vol. 16, no. 2, pp. 121-137, 2015.
- P.D. Michailidis and K.G. Margaritis, Scientific Computations on Multi-core Systems using Different Programming Frameworks, Applied Numerical Mathematics, vol. 104, pp. 62-80, Elsevier-Science, 2016.
- C.S. Kouzinopoulos, P.D. Michailidis and K.G. Margaritis, Parallel Two-Dimensional Pattern Matching Algorithms on GPU, Neural, Parallel and Scientific Computations, vol. 25, pp. 165-180, 2017.

- P.D. Michailidis, A preliminary performance study on nonlinear regression models using the Jaya optimisation algorithm, IAENG International Journal of Applied Mathematics, vol. 48, no. 4, pp. 424-428, 2018.
- P.D. Michailidis, An Efficient Multi-core Implementation of the Jaya Optimisation Algorithm, International Journal of Parallel, Emergent and Distributed Systems, vol. 34, no. 3, pp. 288-320, 2019.
- P. Michailidis, V. Vlasidis, S. Karekla, An Exploratory Study on the Attitudes of the Greek Believers towards the State's Measures during the First Wave of Coronavirus Pandemic, Social Sciences, 10(2), pp. 1–22, 67, 2021.

### **Conference Papers**

- P.D. Michailidis and K.G. Margaritis, Implementing String Searching Algorithms on a Network of Workstations using MPI, in Proceedings of the 5th Hellenic European Conference on Computer Mathematics and its Applications (HERCMA'2001), Athens, Greece, Vol. 1, pp. 298-305, 2001.
- P.D. Michailidis and K.G. Margaritis, String Matching Problem on a Cluster of Personal Computers: Experimental Results, in Proceedings of the 15th International Conference on Systems for Automation of Engineering and Research (SAER'2001), Sofia, Bulgaria, pp. 71-75, 2001.
- P.D. Michailidis and K.G. Margaritis, String Matching Problem on a Cluster of Personal Computers: Performance Modeling, in Proceedings of the 15th International Conference on Systems for Automation of Engineering and Research (SAER'2001), Sofia, Bulgaria, pp. 76-81, 2001.
- P.D. Michailidis and K.G. Margaritis, Parallel Text Searching Application on a Heterogeneous Cluster of Workstations, in Proceedings of the 2001 International Conference on Parallel Processing Workshops (ICPP'01), Valencia, Spain, pp. 169-175, 2001.
- P.D. Michailidis and K.G. Margaritis, Implementation of the String Matching Problem on a Cluster of Workstations, in Proceedings of the 8th Panhellenic Conference on Informatics (PCI'2001), Nicosia, Cyprus, Vol. 2, pp. 72-81, 2001.
- P.D. Michailidis and K.G. Margaritis, Implementation of the Approximate String Matching Application on a Cluster of Heterogeneous Workstations, in Proceedings of the First International Symposium on Parallel and Distributed Computing (ISPDC'2002), Iasi, Romania, pp. 193-204, 2002.
- P.D. Michailidis and K.G. Margaritis, A Processor Array for Approximate Limited Expression Matching, in Proceedings of the First Workshop on Application Specific Processors (WASP'2002), Instabul, Turkey, pp. 137-144, 2002.
- P.D. Michailidis and K.G. Margaritis, Flexible Approximate String Matching Application on a Heterogeneous Distributed Environment, in Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'03), Las Vegas, USA, vol. 1, pp. 164-172, 2003.
- P.D. Michailidis and K.G. Margaritis, Parallel Architecture for Flexible Approximate Text Searching, in CD-ROM Proceedings of the 7th WSEAS International Multiconference on Circuits, Systems, Communications and Computers, (WSEAS-CSCC'2003), Corfu, Greece, 2003. Also it is published in Recent Advances in Communications and Computer Science, pp. 384-391, WSEAS Press.
- P.D. Michailidis and K.G. Margaritis, Performance Analysis of Approximate String Searching Implementations for Heterogeneous Computing Platform, in Proceedings of

the 2003 International Conference on Parallel Processing Workshops (ICPP'2003), Taiwan, pp. 173-180, 2003.

- P.D. Michailidis and K.G. Margaritis, Bit-Level Processor Array Architecture for Flexible String Matching, in Proceedings of the 1st Balkan Conference in Informatics (BCI'2003), Thessaloniki, Greece, pp. 517-526, 2003.
- T. Typou, V. Stefanidis, P.D. Michailidis and K.G. Margaritis, Matrix Vector Multiplication on a Cluster of Workstations, in Proceedings of the 1st International Conference "From Scientific Computing to Computational Engineering" (IC-SCCE'2004), Athens, Greece, vol. II, pp. 713-726, 2004.
- T. Typou, V. Stefanidis, P.D. Michailidis and K.G. Margaritis, Implementing Matrix Multiplication on an MPI Cluster of Workstations, in Proceedings of the 1st International Conference "From Scientific Computing to Computational Engineering" (IC-SCCE'2004), Athens, Greece, vol. II, pp. 631-639, 2004.
- V. Stefanidis, P.D. Michailidis and K.G. Margaritis, Parallelization of Matrix Vector Multiplication on a Cluster Platform, in Proceedings of the 2nd International Conference of Applied Mathematics, Plovdiv, Bulgaria, p. 258, 2005.
- P.D. Michailidis and K.G. Margaritis, A Programmable Array Processor Architecture for Flexible Approximate String Matching Algorithms, in Proceedings of the 2005 International Conference on Parallel Processing Workshops (ICPP'2005), Oslo, Norway, pp. 201-209, 2005.
- V. Stefanidis, P.D. Michailidis and K.G. Margaritis, An Improved Performance Prediction Model for Matrix - Vector Multiplication on Cluster of Workstations, in Proceedings of the 7th Hellenic European Conference on Computer Mathematics and its Applications (HERCMA'2005), Athens, Greece, 2005.
- P.D. Michailidis and K.G. Margaritis, Implementation of a Programmable Array Processor Architecture for Approximate String Matching Algorithms on FPGAs, in Proceedings of 20th IEEE International Parallel and Distributed Processing Symposium and the 13th Reconfigurable Architectures Workshop (RAW'2006), Rhodes, Greece, 4 pages, 2006.
- P.D. Michailidis and K.G. Margaritis, Generalized Performance Model for Flexible Approximate String Matching on a Distributed System, in Proceedings of the 11th Panhellenic Conference on Informatics (PCI'2007), vol. II, pp. 279 288, Patras, Greece, New Technologies Publications, 2007.
- P.D. Michailidis and K.G. Margaritis, Parallelization of Multiple String Matching on a Cluster Platform, in Proceedings of the 8th Hellenic European Conference on Computer Mathematics and its Applications (HERCMA'2007), Athens, Greece, 2007.
- P.D. Michailidis and K.G. Margaritis, A Parallel Implementation for Finding the Longest Common Subsequence, in Proceedings of the 6th International Conference on Engineering Computational Technology (ECT'2008), Athens, Greece, 2008.
- P.D. Michailidis and K.G. Margaritis, Performance Evaluation of Multiple Approximate String Matching Algorithms Implemented with MPI Paradigm in an Experimental Cluster Environment, in Proceedings of the 12th Panhellenic Conference on Informatics (PCI'2008), pp. 168-172, Samos, Greece, 2008.
- P.D. Michailidis and K.G. Margaritis, MPI Implementations for Solving Dot Product on Heterogeneous Platforms, in Proceedings of the 9th Hellenic European Conference on Computer Mathematics and its Applications (HERCMA'2009), Athens, Greece, 2009.
- P.D. Michailidis and K.G. Margaritis, Experimental Study on Variants of the Zhu-Takaoka String Matching Algorithm, in Proceedings of the 4th Balkan Conference in Informatics (BCI'2009), pp. 116-122, Thessaloniki, Greece, 2009.

- P.D. Michailidis and K.G. Margaritis, Performance Models for Matrix Computations on MultiCore Processors using OpenMP, in Proceedings of the 11th International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT'2010), pp. 375-380, Wuhan, China, 2010.
- P.D. Michailidis and K.G. Margaritis, Implementing Parallel LU Factorization with Pipelining on a MultiCore using OpenMP, in Proceedings of the 13th IEEE International Conference on Computational Science and Engineering (CSE-2010), pp.253-260, Hong Kong SAR, China, 2010.
- C. Kouzinopoulos, P.D. Michailidis and K.G. Margaritis, Experimental Results on Multiple Pattern Matching Algorithms for Biological Sequences, in Proceedings of International Conference on Bioinformatics Models, Methods and Algorithms (BIOINFORMATICS 2011), pp. 274-277, Rome, Italy, 2011.
- P.D. Michailidis and K.G. Margaritis, Open Multi Processing (OpenMP) of Gauss-Jordan Method for Solving System of Linear Equations, in Proceedings of the 11th IEEE International Conference on Computer and Information Technology (CIT-2011), pp. 314-319, Pafos, Cyprus, 2011.
- C.S. Kouzinopoulos, P.D. Michailidis and K.G. Margaritis, Performance Study of Parallel Hybrid Multiple Pattern Matching Algorithms for Biological Sequences, in Proceedings of International Conference on Bioinformatics Models, Methods and Algorithms (BIOINFORMATICS 2012), pp. 182-187, Vilamoura, Portugal, 2012.
- P.D. Michailidis and K.G. Margaritis, Computational Comparison of Some Multi-core Programming Tools for Matrix Computations, in Proceedings of the 14th IEEE International Conference on High Performance Computing and Communications (HPCC-2012), pp. 143-150, Liverpool, UK, 2012.
- P.D. Michailidis and K.G. Margaritis, Performance Study of Matrix Computations using Multicore Programming Tools, in Proceedings of the 5th Balkan Conference on Informatics (BCI'2012), pp. 186-192, Novi Sad, Serbia, 2012.
- P.D. Michailidis and K.G. Margaritis, An Experimental Study for Parallelizing Basic Kernels From Scientific Computing using Multicore Libraries, in Book of Abstracts of the 5th Conference on Numerical Analysis (NumAn'2012), pp. 33, Ioannina, Greece, 2012.
- P.D. Michailidis and K.G. Margaritis, Implementing Basic Computational Kernels of Linear Algebra on Multicore, in Proceedings of the 16th Panhellenic Conference on Informatics (PCI'2012), pp. 217-222, Piraeus, Greece, IEEE Computer Society, 2012.
- P.D. Michailidis and K.G. Margaritis, Efficient Multi-Core Computations in Computational Statistics and Econometrics, in Proceedings of the 15th IEEE International Conference on Computational Science and Engineering (CSE'2012), pp. 267-274, Pafos, Cyprus, IEEE Computer Society, 2012.
- P.D. Michailidis and K.G. Margaritis, Parallel Computing of Kernel Density Estimation with Different Multi-core Programming Models, in Proceedings of the 21st Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP'2013), pp. 77-85, Belfast, Northern Ireland, IEEE Computer Society, 2013.
- M. Dasygenis and P.D. Michailidis, Evaluating modern parallelization techniques on block matching algorithms, in Proceedings of the 18th Panhellenic Conference on Informatics (PCI'2014), pp. 1-6, Athens, Greece, ACM, 2014.