

(α): Curriculum Vitae

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Personal

Born in Limassol, Cyprus, on August 22, 1960; Greek; Cypriot Citizen; *Marital Status:* Single; *Languages:* Greek (native) and English; Completed military service (July 1978–September 1980)

**Research
Interests
(Current)**

Algorithmic Game Theory

Computation of Nash Equilibria, Price of Anarchy, Mechanism Design

Distributed Computing

Distributed Algorithms and Complexity, Distributed Data Structures, Lower Bounds and Impossibility Results; concrete foundational problems such as *Counting*, *Synchronization* and *Leader Election*.

Networking Theory

Communication Algorithms, Lower Bounds and Impossibility Results; concrete problems such as *Flow Control*, *Routing*, *Packet-Switching* and *Queueing*; concrete domains such as *Non-Cooperative Networks*, *Sensor Networks*, *Mobile Networks* and *Ad-hoc Wireless Networks*.

Theory of Computation

Computational Complexity, Approximation Algorithms, Randomized Algorithms

Discrete Mathematics

Graph Theory, Combinatorics

**Teaching
Interests**

Theoretical Computer Science

Theory of Computation, Design and Analysis of Algorithms, Algorithms and Complexity, Data Structures, Distributed Computing, Parallel Computing, Algorithmic Game Theory

Systems and Programming

Distributed Systems, Parallel Systems, Computer Networks, Concurrent Programming

Discrete Mathematics for Computer Science

Combinatorics, Graph Theory, Probability

Faculty Appointments *University of Cyprus, Nicosia, Cyprus*
Associate Professor (tenured), Department of Computer Science, August 2000 – present

University of Connecticut, Storrs, Connecticut
Assistant Professor, Department of Computer Science and Engineering, January 1999 – August 1999 (on sabbatical leave from University of Cyprus)

University of Cyprus, Nicosia, Cyprus
Assistant Professor, Department of Computer Science, July 1993 – July 2000

University of Crete, Heraklion, Greece
Adjunct Assistant Professor, Department of Computer Science, September 1992 – July 1993

Research & Other Appointments *Department of Mathematics and Computer Science, Universität Paderborn, Paderborn, Germany*
Guest Professor; November 2000

DIMACS Center for Discrete Mathematics and Theoretical Computer Science, Piscataway, New Jersey
Visitor to the DIMACS Special Year on Networks; June 1998 – August 1998; Local host: *Dr. Michael Merritt (AT&T Labs – Research)*

Institute of Computer Science, Foundation for Research and Technology – Hellas (FORTH), Heraklion, Greece
Research Associate; May 1994 – September 1994 & September 1992 – July 1993

Harvard University, Cambridge, Massachusetts
Teaching Fellow & Graduate Research Assistant, Division of Applied Sciences; September 1987 – August 1992

Education *Harvard University, Cambridge, Massachusetts*
Ph. D. in Computer Science, Division of Applied Sciences, November 1992; Thesis title: “Timing-Based Distributed Computation: Algorithms and Impossibility Results”; Thesis Advisor: *Professor Harry R. Lewis*

Harvard University, Cambridge, Massachusetts
S. M. in Computer Science, Division of Applied Sciences, January 1988

National Technical University of Athens, Athens, Greece
Diploma in Electrical Engineering, Summa cum Laude (*GPA: 9.08/10.00*), Department of Electrical Engineering (currently Department of Electrical and Computer Engineering), November 1985; Diploma Project title: “Interpolation with Rational Functions: Algorithms and Applications”; Diploma Project Supervisor: *Professor John E. Diamessis*

**Editorial
Positions
(Regular)**

Journal of Interconnection Networks

Member of Editorial Board; March 2003 – present

Bulletin of the European Association for Theoretical Computer Science (EATCS)

The Distributed Computing Column Editor; March 2000 – present

Theoretical Computer Science (Track B: Logic, Semantics, and the Theory of Programming)

Member of Editorial Board; July 1998 – present

**Editorial
Positions
(Guest)**

Theoretical Computer Science Track A: Algorithms, Automata, Complexity and Games, & Track B: Logic, Semantics and the Theory of Programming

Guest Co-Editor (with Samson Abramsky); Special Issue titled "Game Theory Meets Theoretical Computer Science", Vol. 343, Nos. 1–2, October 2005

Computing and Informatics (formerly Computers and Artificial Intelligence)

Guest Editor; Special Issue titled "Algorithmic Foundations of Communication Networks", Vol. 20, No. 2, March 2001.

Theoretical Computer Science (Track B: Logic, Semantics, and the Theory of Programming)

Guest Editor; Special Issue titled "Distributed Algorithms", Vol. 220, Nos. 1 & 2, June 1999

**Technical
Program
Committees
of Conferences
(Selected)**

2nd International Workshop on Incentive-Based Computing (IBC 2006)

Program Committee Member

IASTED International Conference on Parallel and Distributed Computing & Networks (PDCN 2006)

Program Committee Member

31st International Colloquium on Automata, Languages and Programming (ICALP 2005)

Program Committee Member

17th Annual ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2005)

Program Committee Member

25th IEEE International Conference on Distributed Computing Systems (ICDCS 2005)

Program Committee Member for the track "Formal Methods and Theory"

IASTED International Conference on Parallel and Distributed Computing & Networks (PDCN 2005)

Program Committee Member

10th International Coll. on Structural Information & Communication Complexity (SIROCCO 2004)

Program Committee Member

15th International Parallel and Distributed Processing Symposium (IPDPS 2004)

Program Committee Member

15th Annual ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2003)

Program Committee Member

8th European Conference on Parallel Processing (EuroPar 2002)

Local Chair for Topic 09 (Distributed Systems and Algorithms)

22nd IEEE International Conference on Distributed Computing Systems (ICDCS 2002)

Program Committee Member for the track "Distributed Algorithms"

8th International Coll. on Structural Information & Communication Complexity (SIROCCO 2002)

Program Committee Member

20th Annual ACM Symposium on Principles of Distributed Computing (PODC 2001)

Program Committee Member

1st International Workshop on Parallel and Distributed Computing Issues in Wireless Networks and Mobile Computing, held under IPDPS 2001

Program Committee Member

21st IEEE International Conference on Distributed Computing Systems (ICDCS 2001)

Program Committee Member for the track "Networks and Network Protocols"

25th International Symposium on Mathematical Foundations of Computer Science (MFCS 2000)

Program Committee Member

International Workshop on Distributed System Validation and Verification (DSVV 2000), held under ICDCS 2000

Program Committee Member

13th International Symposium on Distributed Computing (DISC 1999)

Program Committee Member

4th European Conference on Parallel Processing (EuroPar 1998)

Vice-Chair for Topic 09 (Distributed Systems and Algorithms)

12th International Symposium on Distributed Computing (DISC 1998)

Program Committee Member

11th International Workshop on Distributed Algorithms (WDAG 1997)

Program Committee Chair

Steering Committees of Conferences *International Symposium on DIStributed Computing (DISC) (formerly International Workshop on Distributed Algorithms (WDAG)), annual European conference, running since 1987*
Steering Committee Member (elected), October 2002 – October 2004

International Symposium on DIStributed Computing (DISC) (formerly International Workshop on Distributed Algorithms (WDAG)), annual European conference, running since 1987

Steering Committee Member (ex officio), October 1996 – October 1999

Conference Organization *33rd Annual ACM Symposium on Theory of Computing (STOC 2001), Heraklion, Crete, May 2001*

Organizing Committee Member

28th International Colloquium on Automata, Languages and Programming (ICALP 2001), Heraklion, Crete, May 2001

Organizing Committee Member

25th International Symposium on Mathematical Foundations of Computer Science (MFCS 2000), Bratislava, Slovak Republic. August/September 2000

Organizer/Coordinator for *Workshop on Algorithmic Foundations of Communication Networks* held under *MFCS 2000*

DIMACS Center for Discrete Mathematics and Theoretical Computer Science, Piscataway, New Jersey

Principal Organizer for *Workshop on Networks in Distributed Computing*, in the context of DIMACS Special Year on Networks, October 1997; co-organizers: Michael Merritt (AT&T Labs– Research) and Nir Shavit (Tel-Aviv University & Sun Microsystems Labs); Workshop’s budget: USD 15,000, funded by *NSF*

**Invited
Lectures
at Schools**

Taught for:

- *School on Algorithmic Aspects of Game Theory in Large Scale Networks (AAGTLSN 2004)*, Santorini, Greece, October 11–15, 2004; Title of Lectures: "Discrete Routing Games over a Simple Non-Cooperative Network"

**Invited
Tutorials
at
Conferences**

Delivered a **Tutorial** at:

- *8th European Conference on Parallel Processing (EuroPar 2002)*, Paderborn, Germany, August 27–30, 2002; Tutorial title: "Game Theory in Network Routing: a Primer"; delivered on August 27, 2002, 9:00 a.m. – 12:30 p.m.

**Invited
Lectures**

Has been an **Invited Speaker** for:

- *8th Italian Conference on Theoretical Computer Science (ICTCS 2003)*, Bertinoro, Italy, 13–15 October 2003; title of **Invited Talk**: "The Structure and Complexity of Extreme Nash Equilibria"

**Invited
Participations**

Has been an **Invited Participant** for:

- *1st Bertinoro Workshop on Algorithmic Game Theory (AGATE 2004)*, at *Bertinoro International Center for Informatics (BICI)*, July 5–9, 2004; Organizers: Y. Mansour, P. Penna, P. Persiano & V. Vazirani
- *Dagstuhl Seminar on Approximation and Randomized Algorithms in Communication Networks*, at *The International Conference and Research Center for Computer Science in Schloss Dagstuhl*, June 16–21, 2002; Organizers: E. Bampis, K. Jansen, P. Persiano, R. Solis-Oba & G. Wilfong
- *Workshop on Complexity Issues in Distributed and Parallel Computation, Complexity Theory Program*, at *The Fields Institute for Research in Mathematical Sciences, University of Toronto*, June 1–5, 1998; Organizer: F. Fich; Delivered a talk with title: "The Theory of Counting Networks"
- *Workshop on Networks in Distributed Computing*, DIMACS Special Year on Networks (1997–2000), at *DIMACS (NSF Science and Technology Center for Discrete Mathematics and Theoretical Computer Science)*, Rutgers University, October 27–29, 1997; Organizers: M. Mavronicolas, M. Merritt & N. Shavit; Delivered a talk with title "Timing-Based Connection Management"
- *Workshop on Parallel Processing of Discrete Optimization Problems*, DIMACS Special Year on Parallel Computing (1993–1994), at *DIMACS (NSF Science and Technology Center for Discrete Mathematics and Theoretical Computer Science)*, Rutgers University, April 28–29, 1994; Delivered a talk with title "Proving Correctness for Balancing Networks"

**Colloquia
Lectures
(Selected)**

Has been a **Colloquium Lecturer** for the following colloquia:

- *Algorithms Seminar*, Department of Informatics and Telecommunications, University of Athens, April 2005; talk title: "A Simple Graph-Theoretic Model for Selfish Restricted Scheduling"
- *Seminar Series*, Paderborn Center for Parallel Computing, University of Paderborn, Germany, December 2004; talk title: "Universal Bufferless Routing and Direct Routing"
- *Seminar Series*, Paderborn Center for Parallel Computing, University of Paderborn, Germany, July 2004; talk title: "The Cost of Concurrent, Low-Contention Read&Modify&Write"
- *Seminar Series*, Paderborn Center for Parallel Computing, University of Paderborn, Germany, July 2003; talk title: "Linearizability in the Presence of Drifting Clocks and Under Different Delay Assumptions"
- *Seminar Series*, Department of Electrical and Computer Engineering, National Technical University of Athens, Athens, Greece, December 2002; talk title: "Game-Theoretic Approaches to Network Routing"
- *Seminar Series*, Paderborn Center for Parallel Computing, University of Paderborn, Germany, November 2000; talk title: "Convergence Complexity of Fair, Rate-Based Flow Control"
- *Research Seminar Series*, Department of Computer Science and Engineering, University of Connecticut, USA, June 1998; talk title: "The Theory of Counting Networks"
- *Seminar Series*, AT&T Labs – Research, USA, June 1998; talk title: "The Theory of Counting Networks"
- *Seminar Series*, Department of Computer Engineering and Informatics, University of Patras, Greece, April 1998; talk title: "Contention in Balancing Networks Resolved"
- *Seminar Series*, Department of Computer Science, Brown University, USA, May 1996; talk title: "The Impact of Timing on Linearizability in Counting Networks"
- *Seminar Series*, Division of Computer Science, Department of Electrical and Computer Engineering, National Technical University of Athens, Greece, December 1995; talk title: "A Combinatorial Treatment of Balancing Networks"
- *Seminar Series*, Max-Planck Institut für Informatik, Saarbrücken, Germany, November 1995; talk title: "A Combinatorial Treatment of Balancing Networks"
- *Colloquium Series*, Combinatorics, Computing and Applications Group, Los Alamos National Laboratory, USA, January 1995; talk title: "A Logarithmic Depth Counting Network"
- *Colloquium Series on Applied Mathematics*, Department of Mathematics and Statistics, University of Cyprus, Cyprus, March 1994; talk title: "A Combinatorial Treatment of Balancing Networks"
- *Theory of Distributed Systems Seminar*, Laboratory for Computer Science, Massachusetts Institute of Technology, USA, March 1994; talk title: "A Combinatorial Treatment of Balancing Networks"
- *Lecture Series on Parallel and Super-Computing: Theory, Algorithms and Applications*, Department of Computer Science and Department of Public and Business Administration, University of Cyprus, Cyprus, December 1993; talk title: "Counting Networks"
- *Research Seminar Series*, Department of Computer Science, University of Crete, Greece, October 1992; talk title: "Timing-Based Distributed Algorithms"
- *Theory of Distributed Systems Seminar*, Laboratory for Computer Science, Massachusetts Institute of Technology, USA, January 1992; talk title: "Bounds on the Costs of Implementing Shared Memory"

Reviewing

Reviewed research articles/books that had been published, for:

- *ACM Computing Reviews*
- *Mathematical Reviews*
- *ACM SIGACT News*

**Journal
Refereeing**

Refereed (submitted) research articles as an external referee for the following journals:

- *Algorithmica*
- *Concurrency and Computation: Practice and Experience*
- *Distributed Computing*
- *IEEE Transactions on Parallel and Distributed Systems*
- *Journal of Discrete Algorithms*
- *International Journal of Parallel Programming*
- *Theory of Computing Systems*
- *IEEE Transactions on Computers*
- *Journal of Algorithms*
- *Theoretical Computer Science*
- *Journal of the ACM*
- *Parallel Processing Letters*
- *Information Processing Letters*
- *Journal of Parallel and Distributed Computing*
- *The Computer Journal*
- *Computational Optimization and Applications*

**Conference
Refereeing
(Selected)**

Refereed research articles that were submitted to the following conferences:

- *23rd International Symposium on Theoretical Aspects of Computer Science (STACS 2006)*
- *17th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2006)*
- *21st International Symposium on Theoretical Aspects of Computer Science (STACS 2004)*
- *28th International Symposium on Mathematical Foundations of Computer Science (MFCS 2003)*
- *14th International Symposium on Fundamentals of Computation Theory (FCT 2003)*
- *23rd Annual ACM Symposium on Principles of Distributed Computing (PODC 2003)*
- *International Parallel and Distributed Processing Symposium (IPDPS 2003)*
- *6th International Workshop on Randomization and Approximation Techniques in Computer Science (RANDOM 2002)*
- *31st Annual ACM Symposium on Theory of Computing (STOC 2002)*
- *13th International Parallel and Distributed Processing Symposium (IPDPS 2002)*
- *15th International Symposium on Distributed Computing (DISC 2001)*
- *3rd Panhellenic Logic Symposium, 2001*
- *14th International Symposium on Distributed Computing (DISC 2000)*
- *20th Annual ACM Symposium on Principles of Distributed Computing (PODC 2000)*
- *19th Annual ACM Symposium on Principles of Distributed Computing (PODC 1999)*
- *3rd IEEE Symposium on Computers and Communications (ICC 1998)*
- *18th Annual ACM Symposium on Principles of Distributed Computing (PODC 1998)*
- *International Conference on Parallel and Distributed Systems (PDCS 1997)*
- *9th IASTED International Conference on Parallel and Distributed Computing and Systems, 1997*
- *15th Annual ACM Symposium on Principles of Distributed Computing (PODC 1996)*
- *8th International Workshop on Distributed Algorithms (WDAG 1994)*
- *20th Annual IEEE International Symposium on Computer Architecture (ISCA 1993)*
- *33rd Annual IEEE Symposium on Foundations of Computer Science (FOCS 1992)*
- *11th Annual ACM Symposium on Principles of Distributed Computing (PODC 1992)*
- *24th Annual ACM Symposium on Theory of Computing (STOC 1992)*

**Professional
Affiliations**

Professional Member of:

- Association for Computing Machinery (ACM) (Special Interest Group for Algorithms and Computation Theory)
- European Association for Theoretical Computer Science (EATCS)
- Institute of Electrical and Electronic Engineers (IEEE), Computer Society
- Society for Industrial and Applied Mathematics (SIAM) (SIAM Activity Group in Discrete Mathematics)
- American Mathematical Society (AMS)