## **CURICCULUM VITAE**

NAME Theodore Apostolopoulos

**TITLE** Professor

**DATE OF BIRTH** February 23<sup>rd</sup> 1956

**NATIONALITY** Greek

**WORK ADDRESS** Department of Informatics

Athens University of Economics and Business 76 Patission st., GR 10434 Athens, Hellas

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### **EDUCATION**

1979 Diploma in Electrical and Mechanical Engineering,

National Technical University of Athens

1983 PhD in Informatics

National Technical University of Athens

### **RESEARCH INTERESTS**

Computer Networks-Distributed Networks

- Grid Computing
- Broadband infrastructure and services
- E-services, peer-to-peer services
- Mobile and ubiquitous systems
- Performance evaluation, Queuing Theory

## **MEMBER OF SCIENTIFIC SOCIETIES**

- 1. Technical Chamber of Greece
- 2. Greek Computer Society
- 3. ACM
- 4. IEEE
- 5. IEEE Computer Society
- 6. IEEE Communication Society

## PROFESSIONAL EXPERIENCE

**1984-1986** : Analyst

Computer Center of Hellenic Air force

**1987-1988** : Analyst

Computer Center of University of Athens

**Autumn 1988** : Invited Lecturer

Department of Informatics, University of Athens (an one-semester undergraduate course in Computer Networks)

**1988-1993** : Assistant Professor

Department of Informatics,

Athens University of Economics and Business

**Summer 1990 :** Visiting Assistant Professor

College of Engineering, University of Iowa, USA

**1993 – August :** Associate Professor

**'97** Department of Informatics,

Athens University of Economics and Business

**September '97- :** *Professor* 

today Department of Informatics,

Athens University of Economics and Business,

Director of Communications and Computer Systems Laboratory

**February 1998 – :** Vice-Rector of Academic Affairs of Athens University of Economics

**August 2001** and Business

#### **TEACHING EXPERIENCE**

# **Undergraduate Courses**

Computer Architecture

- Computer Programming
- Design of Databases
- Databases
- Performance Evaluation of Computer Systems
- Programming Commercial Applications
- Special Topics in Operating Systems
- Data Transmission-Communications
- Computer Networks

## **Postgraduate Courses**

- Distributed Systems and Computer Networks
- Computer Networks
- Mobile and ubiquitous systems
- Special Topics in Telecommunications

### **RESEARCH PROJECTS**

Prof. Apostolopoulos is Director of Communications and Computer Networks Laboratory in the Department of Informatics, AUEB and has participated in numerous research projects. Some of them, in which he has participated as the scientific coordinator, are presented below:

- 1. "Technical support consultant for the development of Metropolitan Optical Fiber Networks of North Aegean District", 3<sup>rd</sup> Community Support Program (CSP), Information Society, 2004.
- 2. "Promoting broadband services and applications at Athens University of Economics and Business", 3<sup>rd</sup> CSP, Information Society, 2004.
- 3. "MobiSmart: Secure Mobile-Payment Platform Based on EMV-Compliant Smart Cards", GSRT, 2004
- 4. "Improvement and technological upgrade of the network infrastructure of Athens University of Economics and Business", 3<sup>rd</sup> CSP, Information Society, 2002-2003.
- 5. "Provision of complementary equipment for the e-learning classroom of Athens University of Economics and Business, 3<sup>rd</sup> CSP, Information Society, 2002-2003.
- 6. "Advanced Visual INTERfaces for timely Retrieval of Vital Patient Related MEDical Information (INFACE)", EC, IST, 2002.
- 7. "An intelligent wearable platform for illness prevention related to ambient and athletic conditions at outdoor environments (PREVENTIVE), EC, IST, 2002.
- 8. "STate of the ARt Financial Services for the inHabitants of isolated areas (STARFISH)", EC, IST-1999-13059, June 2000.
- 9. "E-gate The Institutional and Technological Framework for e-markets", Human Networks, General Secretariat of Research and Technology (GSRT), 2000.
- 10. "Innovative Telematics Services in Athens University of Economics and Business", Greek Information Society, 2000.
- 11. "Intra-University Teleteaching Network", Greek Information Society, 2000.
- 12. "AMFITRYON: Interactive television programs over computer networks", GSRT, 1999.
- 13. "ATM-NET: Internetworking and advanced services over the Public ATM Network", GSRT, 1999.
- 14. "Collaboration with Hellenic National Documentation Center (HNDC) for R&D activities", HNDC, 1998.
- 15. "Computer Telephony Integration", GSRT, 1998.
- 16. "Direct Internet connection between the academic and research networks of Greece and Bulgaria", GSRT, 1997.
- 17. "New applications of telematics in education", Greek-Spanish Collaboration Program, GSRT, 1997.
- 18. "Greek University Network, GUNET", Greek Ministry of Education, 1997.
- 19. "Greek University ATM Network", Greek Ministry of Education, 1997.
- 20. "Training educators in deploying Internet and multimedia information", Educators' Mobility Program, Greek Ministry of Education, 1997.
- 21. "DEDICS: Distributed Environmental Disaster Information and Control System", Telematics Application Programme, E.C.- DG XIII, 1996.
- 22. "Network Operations Center for the design, management and improvement of Telecommunication Networks of Athens University of Economics and Business (AUEB)", Greek Ministry of Education, 1996.
- 23. "An Expert Tool for Performance Management in Computer Networks", GSRT, 1996.
- 24. "TEN 34: Trans European Network Interconnect at 34 Mbps", E.C., DGIII, DG XIII, Subcontractor of GSRT, 1996.
- 25. "Network Management: an environment implementing quality of service in computer networks and their applications", PENED, GSRT, 1996.

- 26. "Development and technical support of the Greek Research and Technology Network", GSRT, 1995.
- 27. "An Intelligent Automated System for Managing Performance in computer Networks", YPER, GSRT, 1995.
- 28. "Design of Data and Telephony Network of University of Ioannina, 1995.
- 29. "Implementation of network management software. Graphical User Interface-Management Applications", Siemens S.A., 1993.
- 30. "Development of software for implementing distributed applications in TCP/IP Networks", Research Center of AUEB, 1993.
- 31. "Estimating performance of a system managing transactions in a distributed environment", Research Center of AUEB, 1991.

### **PUBLICATIONS**

- 1. G. Parissis, T. Apostolopoulos, G. Xylomenos. "DHTbd: A Reliable Block-based Storage System for High Performance Clusters", *IEEE International Symposium on Cluster, Cloud and Grid Computing (CCGRID)*, Newport Beach, USA, 2011.
- 2. G. Parissis and T. Apostolopoulos. "A distributed hash table-based approach for providing a file system neutral, robust and resilient storage infrastructure", 5th Conference on Next Generation Internet Design and Engineering (NGI 2009), Aveiro, Portugal, 2009.
- 3. A. Kousaridas, G. Parissis and T. Apostolopoulos. "An open financial services architecture based on the use of intelligent mobile devices", *Electronic Commerce Research Application*, Elsevier, Vol. 7. 2008, pp. 232-246.
- 4. G. Oikonomou and T. Apostolopoulos. "WebDMF: A Web-based Management Framework for Distributed Services", *The 2008 International Conference of Parallel and Distributed Computing (ICPDC 08)*, 2008.
- 5. G. Oikonomou and T. Apostolopoulos. "Using a Web-based Framework to Manage Grid Deployments", *The 2008 International Conference on Grid Computing and Applications*, 2008.
- 6. G. Oikonomou and T. Apostolopoulos. "Web-Based Management of Content Delivery Networks", 19th IFIP/IEEE International Workshop on Distributed Systems: Operations and Management (DSOM 08), 2008.
- 7. G. Parissis, S. Arkoulis and T. Apostolopoulos. "An open architecture for monitoring and measuring QoS indicators in wireless community networks", 4th Conference on Next Generation Internet Design and Engineering (NGI 2008), Krakow, Poland, 2008.
- 8. A. Kousaridas, G. Parissis and T. Apostolopoulos. "Mobile Financial Services: A scenario-driven requirements' analysis", *In proceedings of the third international conference on Web Information Systems and Technologies 2007*, Barcelona, Spain, 2007.
- 9. G. Oikonomou and T. Apostolopoulos. "A Framework for the Management of Distributed Systems Based on SNMP", *Proceedings of the 22nd International Symposium on Computer and Information Sciences (ISCIS 08)*, 2007.
- 10. G. Oikonomou, T. Apostolopoulos and V. Karakoidas. "Pegasus: Competitive Load Balancing Using inetd", 5th System Administration and Network Engineering Conference (SANE 2006), 2006.
- 11. T. Apostolopoulos, I. Kapetanakis and G. Oikonomou. "An Architecture for the Management of Smart Cards by Mobile Devices Using Java Technologies", *CEC '05: Proceedings of the Seventh IEEE International Conference on E-Commerce Technology (CEC05)*, 2005, pp. 527-530.
- 12. Apostolopoulos T. Oikonomou G. "OverTester: A Peer-to-Peer, Modular Toolkit for Network Performance Evaluation", *Accepted to appear in the Proceedings of the Fourth International*

- Symposium on Communication Systems, Networks And Digital Signal Processing, CSNDSP 2004, 20-22 July 2004, Newcastle, UK.
- 13. Apostolopoulos T. Oikonomou G. "A Scalable, Extensible Framework for Grid Management", Proceedings of the IASTED International Conference on Parallel and Distributed Computing and Networks, PDCN 2004, February 17-19, 2004, Innsbruck, Austria.
- 14. Apostolopoulos T., Oikonomou G., "Statistical Analysis of the Performance of IEEE 802.11 LANs", *Proceedings of the IASTED International Conference Communication Systems and Networks (CSN 2003)*, September 8-10, 2003, Benalmádena, Spain.
- 15. Apostolopoulos T., Kakouros G., Psiakki X., "Public Policy and the Telecommunications Evolution: The Case of Greece", *Proceedings of the 14th ITS European Regional Conference*, 24-26 August 2003, Helsinki, Finland.
- 16. Apostolopoulos T., Kefala A., "An E-learning Service Management Architecture", *Proceedings of the 3rd IEEE International Conference on Advanced Learning Technologies*, Athens, Greece, 9-11 July 2003.
- 17. Apostolopoulos T., Kefala A., "A Configurable Middleware Architecture for Deploying E-learning Services over Diverse Communication Networks", *Proceedings of the IASTED International Conference on Computers and Advanced Technology in Education (including the IASTED International Symposium on Web-Based Education)*, 30 June 2 July, 2003, Rhodes, Greece.
- 18. Androutsos A., Apostolopoulos T., Psiakki X., "Charging best-effort services in the presence of two alternative service qualities", Proceedings of the IASTED International Conference Applied Informatics, AI 2000, February 14-17, 2000, Innsbruck, Austria.
- 19.T. Apostolopoulos. "A Time Dependent Network Fault Management Model in TCP/IP Environment", *International Journal of Computer Science and Engineering*, 2000.
- 20. Apostolopoulos T., Kourkoubetis C., Psiakki X., Kohen S., "Multiple Incentive Internet Pricing for NRNs: A Case Study", *Telecommunications Policy*, Vol. 24, No.6/7, July/August 2000.
- 21. Apostolopoulos T., Kourkoubetis C., Psiakki X., Kohen S., "Usage-Based Charging for Internet Usage: A Case Study", *Advances in Informatics*, World Scientific, May 2000.
- 22. Apostolopoulos T., Daskalou V., Androutsos A., "Managing the network state evolution over time using CORBA environment", *IEEE Journal of Selected Areas in Communications*, Vol. 18, No. 5, May 2000.
- 23. Apostolopoulos T., Daskalou V., "Temporal Network Management Information Model and Services", *Journal of Networks and Systems Management*, Vol. 6, No. 3, September 1998.
- 24. Apostolopoulos T., "A Time Dependent Network Fault Management Model in TCP/IP Environment", *International Journal of Computer Science and Engineering*, 1998.
- 25. Androutsos A., Apostolopoulos T., Prokos Y., "Accounting Management in Communication Networks using CORBA Environment", *Proceedings of the IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS'99)*, November 3-6, 1999, Cambridge Massachusetts, USA.
- 26. Apostolopoulos T., Kefala A., "Developing Distant Learning Services over Broadband Networks: Concepts and Alternatives", Proceedings of the IASTED International Conference, Internet and Multimedia Systems Applications, 18-21 October 1999, Nassau, Grand Bahamas.
- 27. Apostolopoulos T., Daskalou V., Kefala A., Zavras A., "Experience from the Development of New Services and Applications over High-speed Networks", ICSE99, International Conference on Systems Engineering, 9-12 August, 1999, Las Vegas, USA.
- 28. Osuna C., Dimitriadis Y., Barrio L., Rubia B., Kefala A., Giakoumakis E., Apostolopoulos T., "A New Telematic and Educational Framework for CSCL Applications", TET'99, Proceedings of International Conference Telecommunications for Education and Training, June 8-11, 1999, Hogskolen I Gjovik, Norway.

- 29. Apostolopoulos T., Zavras A., Lagou E., "Using Data Mining Techniques to Visualize Network Data", *Proceedings of IASTED International Conference on Applied Informatics,* February 1999, Innsbruck, Austria.
- 30. Apostolopoulos T., Zavras A., Botis D., "A Call Admission Control System for a Video on Demand Service", *Proceedings of IASTED International Conference on Applied Informatics*, February 1999, Innsbruck, Austria.
- 31. Apostolopoulos T., Daskalou V., Diamantidis N., Halkiadakis G., Kefala A., "Web-Based Forest Fire Management Information Model And Services", 1999 Western MultiCONFERENCE (WEBSIM'99), January 17-21, 1999, San Francisco, California.
- 32. Apostolopoulos T., Zavras A., "Operation of a Video Server in a LAN Environment", *Proc. Of 16<sup>th</sup> IASTED Int. Conference on Applied Informatics*, February 1998.
- 33. Apostolopoulos T., Skoularidou V., "The Role of a Network Topology MIB in the Quality Control Management of Computer Networks", *Proceedings of the 1<sup>st</sup> International Network Conference (INC '98)*, Plymouth, United Kingdom, 1998.
- 34. Apostolopoulos T., Psiakki X., "Networking Iniatives for R & D in Greece", *Proceedings of the 2<sup>nd</sup> International Conference on Information Infrastructure, ICII'98,* 1998.
- 35. Apostolopoulos T., Alexandris G., Psiakki X., "Performance of ATM based Emulated Local Area Networks", *Proceedings of the 1<sup>st</sup> International Network Conference (INC'98),* Plymouth, United Kingdom, 1998.
- 36. Apostolopoulos T., Moulinos K., "Security Management Using a Security MIB Approach", Proceedings of the 14<sup>th</sup> International Conference on Information Security (IFIP SEC'98), 1998.
- 37. Apostolopoulos T., Daskalou V., Katsikas S., Moulinos K., "Enforcing Security Policies in Large Scale Communication Networks", *Proceeding of the Workshop Security in Large Scale Communication Distributed Systems*, West Lafayette, Indiana, USA, October 1998.
- 38. Apostolopoulos T., Prokos Y., "Accounting Management in TCP/IP Networks: Concepts, Architecture and Implementation", *Proceedings of 2<sup>nd</sup> IASTED Int. Conference on Parallel and Distributed Computing and Networks (PDCN'98)*, Brisbane, Australia, December 1998.
- 39. Apostolopoulos T, Daskalou V., "Temporal Network Management Model: Concepts and Implementation Issues", *Computer Communications*, Vol. 20, 1997.
- 40. Apostolopoulos T., Pramataris K., "Information Technology Investment Evaluation: Investments in Telecommunication Infrastructure", *International Journal of Information Management*, 1997.
- 41. Apostolopoulos T., Daskalou V., "Network Management Services using a Temporal Information Model", *Proceedings of IM'97*, San Diego, 1997.
- 42. Apostolopoulos T., Doukidis G., Pramataris K., "A Techno-economic Approach for IT Investment Evaluation", *Proceedings of 8th International Conference of the Information Resources Management Association*, Vancouver, May 1997.
- 43. Apostolopoulos T., Daskalou V., "The Role of the Time Parameter in a Network Security Management Model", *Proceedings of IEEE International Symposium on Computers and Communications, IEEE ISCC '97,* Alexandria, Egypt, July 1997.
- 44. Apostolopoulos T., "Accounting Management in Communication Networks: Concepts and Architecture", *Proceedings of IEEE International Symposium on Computers and Communications, IEEE ISCC '97,* Alexandria, Egypt, July 1997.
- 45. Apostolopoulos T., Georgakakos K., "Parallel Computation of Streamflow Prediction with Distributed Hydrologic Models", 1996.
- 46. Apostolopoulos T., Daskalou V., "SNMP based Security Network Management using a Temporal Database Approach", *Proceedings of the 12th International Information Security Conference, IFIP / SEC '96*, Greece, May 1996.

- 47. Apostolopoulos T., "Environment for the Development and Testing of Distributed Applications", Proceedings of the 10th International Conference on Systems Engineering, ICSE '96, 1996.
- 48. Apostolopoulos T, Psiakki X., "GR-NET: The Greek Academic Network New Possibilities and Challenges", *Networking and Information Services in the CEE Countries International Workshop*, Bulgaria, July 8-11 1996.
- 49. Apostolopoulos T, Psiakki X., "High Speed Networking up to the End User", *Networking and Information Services in the CEE Countries International Workshop*, Bulgaria, July 8-11 1996.
- 50. Apostolopoulos T. Doukidis G. Pramataris K., "User and evaluation of investment in Informatics", *Special Edition IT & Communications'96*, 1996.
- 51. Apostolopoulos T, Daskalou V., "On the Implementation of a Prototype for Performance Management Services", *Proceedings of IEEE International Symposium on Computers and Communications, IEEE ISCC* '95, Alexandria, Egypt, June 1995.
- 52. Apostolopoulos T, Daskalou V., "A Model for SNMP-based Performance Management Services", *Proceedings of IEEE SICON/ICIE* '95, Singapore, July 1995.
- 53. Apostolopoulos T, Pramataris K., "A Client-Server Architecture for Distributed Problem Solving", *Proceedings of IEEE SICON/ICIE* '95, Singapore, July 1995.
- 54. Apostolopoulos T, Daskalou V., "A Model for a Time Reference Network Management System", Proceedings of International Conference on Computer Communication, ICCC '95, Korea, August 1995.
- 55. Apostolopoulos T., Pramataris K., "Evaluating investment in IT Evaluating the installation of telecommunication network", *5o Hellenic Conference of Informatics*, Greece, December 1995.
- 56. Apostolopoulos T., Vlahos P., "A New Concurrency Control Algorithm for Distributed Systems", Proceedings of 9th International Conference on Systems Engineering, ICSE '93, 1993.
- 57. Apostolopoulos T., Dasios Y., "A Parallel Algorithm for Solving the Inverse Scattering Moment Problem", Journal of Computational and Applied Mathematics, Vol. 42, 1992.
- 58. Apostolopoulos T., "Performance of Read-Only Transactions in a Distributed System", International Journal of Computer Systems Science and Engineering, Vol. 7, October 1992.
- 59. Apostolopoulos T., "Model for the Analysis of a CSMA/CD Channel for Data and Voice Applications", Computer Communications, Vol.14, March 1991.
- 60. Apostolopoulos T., Vlahos P., "A New Concurrency Control Algorithm for Distributed Databases", Proceedings of IMACS-IFAC Symposium on Parallel and Distributed Computing in Engineering Systems, 1991.
- 61. Apostolopoulos T., Kyriaki K., Polyzos D., "The inverse scattering problem for a rigid ellipsoid in linear elasticity", Inverse problems, Vol. 6, No 1, February 1990.
- 62. Apostolopoulos T., "Time Distributions in Discrete Time Markov Processes", J.Appl. Math. Modeling, Vol.13, Nov.1989.
- 63. Apostolopoulos T., "Resource Sharing among N Conflicting Queues Queue Size Distribution and Response Measures", Mathematica Balcanica, Vol 2, p. 45 1988.
- 64. Apostolopoulos T., "Local Area Networks with Non-Symmetrical Load", Technika Chronika Scientific Journal of the Technical Chamber of Greece, Vol.8, No 1, 1988.
- 65. Apostolopoulos T., Xrysafinou O., "A Single Server Queuing Model Consisting of two Types of Customers with Competition Applications", *Statistical Congress '88*, 1988.
- 66. Apostolopoulos T., Protonotarios E. N., Sykas E.D., "Analysis of a New Retransmission Control Algorithm for Slotted CSMA/CD LANs", IEEE Trans. on Computers, June 1987.
- 67. Apostolopoulos T., Protonotarios E. N., "Queuing Analysis of Buffered CSMA/CD Protocols", IEEE Trans. on Communications, September 1986.
- 68. Apostolopoulos T., Protonotarios E. N., "Queueing Analysis of Buffered Slotted Multiple-Access Protocols", Computer Communications, Vol.8, February 1985.

- 69. Apostolopoulos T., Protonotarios E. N., "Performance Evaluation of Slotted Protocols in Local Area Multi-Segment Environment", Proceedings of MELECON '85, 1985.
- 70. Apostolopoulos T., Sykas E.D., "Optimal Hybrid Multi-Access Protocols", Proceedings of MELECON '83, 1983.
- 71. Apostolopoulos T., Protonotarios E., "Approximate Performance Evaluation of Different Multi-Access Slotted Protocols with Buffer", Proceedings of MELECON '83, 1983.
- 72. Apostolopoulos T., Sykas E.D., "An Algorithm for the Control of the Transmission Procedure for Slotted Multi-Access Schemes", Proceedings of MELECON '83, 1983.
- 73. Apostolopoulos T., Sykas E.D., "Analysis of CSMA/CD Protocols", Proceedings of MECO '83, 1983.
- 74. Apostolopoulos T., Protonotarios E. N., Sykas E.D., "Hybrid Protocols for Contention Resolution in Local Area Networks", Proceedings of the 7th Conference on Local Computer Networks, Minnesota, 1982.

### **OTHER PAST ACTIVITIES**

- 1. Scientific Coordinator of Network Operations Center of AUEB. (1996-2009)
- 2. Director of the Postgraduate Studies Committee of Department of Informatics of AUEB.
- 3. Director of Scientific Committee of Greek Research Network (GRNet).
- 4. Member of the seven-member Managing Committee of Greek Universities Network (GUnet).
- 5. Representative of AUEB at GUnet.
- 6. Evaluator in National and European Programs of GSRT and Greek Ministry of Education.
- 7. National Representative at the Telecommunications Technical Committee of IFIP, TC-6 IFIP.