

Curriculum Vitae  
**PERICLES A. MITKAS**  
**Professor and Rector**

**Personal Data**

Born in 1962, Florina, Greece  
 Married to Sophia Mardiri  
 Two children:  
 Alexander 21 and Danae 19  
 Dual Citizenship: US and Greek

**Address**

*Aristotle University of Thessaloniki*  
*Department of Electrical and Computer Engineering*  
*54124 Thessaloniki - GREECE*  
*Tel. +30-2310-99-6390 Fax +30-2310-99-6447*  
*E-mail: mitkas@auth.gr*  
*Web: <http://issel.ee.auth.gr/>*

**EDUCATION**

- Ph.D. in Computer Engineering, Syracuse University, Syracuse, NY. 1990  
 Dissertation Title: "On Relational Database Operations Implemented in Optics"  
 Advisor: Professor P. Bruce Berra
- M.Sc. in Computer Engineering, Syracuse University, Syracuse, NY. 1987
- Diploma of Electrical Engineering,  
 Aristotle University of Thessaloniki, Thessaloniki, Greece. 1985

**ACADEMIC EXPERIENCE****A. Aristotle University of Thessaloniki**

**Professor** 2006 -  
**Associate Professor** 1999 – 2005  
 Department of Electrical and Computer Engineering

**Teaching**

- Taught the following Computer Engineering courses:
 

Data Structures	(5 <sup>th</sup> and 7 <sup>th</sup> semester)
Database Management Systems	(9 <sup>th</sup> semester)
Software Engineering	(8 <sup>th</sup> semester – new course)
Databases and Knowledge Discovery	(New graduate course)
Software Design and Development	(New graduate course)
Advanced Topics in Database Systems	(New graduate course)
Databases and Knowledge Discovery	(Graduate course for the international M.Sc. degree offered through the Erasmus- MUNDUS European program)

**Research**

- Director of the Information Processing and Computing Lab 2005-
- Established the Intelligent Systems and Software Engineering Group 2001

**Administrative Positions and Committee Service**

- **Rector** 2014-2018
- **Department Head and Member of the University Senate** 2011-2013
- Associate Chair of the University Committee on Networks, Communications, and Computer Services 2010-2014
- Chair of the University Committee on Academic Restructuring 2012-2013
- Member of the University Committee for the implementation of the new Center for Interdisciplinary Research and Innovation (Phase 1) 2012-2013
- Director of the Division of Electronics and Computers 2005-2007
- Associate Department Head 2001-2005
- Chair of the ECE Department Curriculum Committee 2001-2002
- Member of the Undergraduate Curriculum Revision Committee 2003-2004
- Chair of the ECE Department Information Technology Committee 2001-2005

**B. Center for Engineering Research and Technology – Hellas (CERTH)**

CERTH is a National Research Center not affiliated with the University. It comprises four Institutes, one of which is the Information Technologies Institute (ITI – [www.iti.gr](http://www.iti.gr)).

- Associate Director of ITI 2002 - 2009
- Director of the Intelligent Systems and Software Engineering Lab at ITI 2001 - 2014
- Faculty affiliate of ITI 2001 - 2014

**C. University of Central Greece**

**Member of the University Executive Board** 2009 - 2010

**Department Head**

Department of Computer Science and Biomedical Informatics 2009 - 2010

**Member of the Department Executive Faculty Council** 2006 - 2010

Our task was to organize the curriculum, hire new faculty, and administer this recently established Department until it becomes self-governed.

**D. Colorado State University, USA**

**Associate Professor**

Department of Electrical and Computer Engineering 1996 -2001  
On sabbatical leave during 1996-97

**Assistant Professor**

Department of Electrical Engineering 1990 - 1996

**Teaching**

- Taught the following Computer Engineering and Optoelectronic Engineering courses:
  - EE101 Engineering Computing (Pascal & Fortran or Pascal & C)
  - EE102 Digital Circuit Logic (Reorganized the labs and wrote a lab manual)
  - EE457 Optical Information Processing (New course; introduced some experiments)
  - EE554 Computer Architecture

EE557 Digital Optical Computing (New course)

EE580 Database Computers (New course)

### **Research**

- Established the Optical Computing Lab.
- Faculty member of the NSF Engineering and Research Center on Optoelectronic Computing Systems Center 1991 - 1999

### **Service**

- Member of several University, College, and Departmental Committees 1991 - 1999

## **E. Aristotle University of Thessaloniki, Greece**

### **• Visiting Professor**

Department of Electrical and Computer Engineering  
1996-1997

Seminars on multimedia database systems, parallel memories, and optical computing.

## **F. Vrije University of Brussels, Belgium**

### **• Visiting Researcher**

Department of Applied Physics 1996-1997  
Performed research on optical computing systems

## **G. Syracuse University, USA**

### **• Teaching Assistant**

Department of Electrical and Computer Engineering 1989-1990  
Partly responsible for the teaching of graduate level courses

### **• Research Assistant**

Department of Electrical and Computer Engineering 1986-1988  
Studied problems associated with Very Large Data/Knowledge Bases

## **RESEARCH INTERESTS**

- Parallel Computer Architectures for Very Large Data and Knowledge Bases
- Software Agents and Multi-agent Systems
- Data Mining and Knowledge Discovery
- Multi-agent Systems for Environmental Management
- Parallel Searching Techniques for Large Biological Databases
- Knowledge Discovery in the Semantic Web

## **PROFESSIONAL SOCIETIES**

Senior Member of IEEE and the IEEE Computer Society

Member of the Optical Society of America (OSA)

Member of the Society for Photooptical Instrumentation Engineering (SPIE)

Member of the SPIE Working Group on Optical Processing & Computing  
and of the SPIE Working Group on Holography

Member of the Association of Computing Machinery (ACM)

Member of the Hellenic Society of Computational Biology and Bioinformatics

Member of the Technical Chamber of Greece

## PROFESSIONAL ACTIVITIES

- **Member of the Board of Directors of the Thessaloniki Innovation Zone** 2013-
- **Associate Member of the National Council on Research and Technology** 2008-2010
- Member of the Editorial Board of the **J. of Information Technology Impact** 2005-
- **Guest Editor of the IEEE Intelligent Systems** (with L.B. Cao and Vladimir Gorodetsky)  
Special issue on Agents and Data Mining published in May 2009.
- **Guest Editor of the IEEE Computer** (with Leo J. Irakliotis)  
Special issue on Optical Computing published in February 1998.
- **Faculty Counselor** to the IEEE Student Branch and  
the SPIE Student Branch at Colorado State University 1991-1999
- **Faculty Advisor** to the Program Committee of the Photonics in Computing II Workshop  
Fort Collins, June 6-8, 1995.
- **Reviewer** for Applied Optics, Optics Letters, the Journal of Parallel and Distributed  
Computing, IEEE Proceedings, Optical Engineering, and various Conferences.
- **Reviewer** of proposals for NSF and NASA.
- **Reviewer** of Computer Engineering textbooks for the WEST Publishing Company.
- **Professional Electrical Engineer** in Greece.
- **Elected Member of the Assembly of Engineers** in the Region of Central Macedonia

## HONORS AND AWARDS

- 1st Place** in the Intern. Trading Agent Competition (TAC2012), Ad Auctions Game 2012  
(Agent MerTACor with K. Chatzidimitriou and A. Symeonidis)
- 1<sup>st</sup> Place** in the International Competition MediaEval 2012 (with K. Vavliakis) 2012
- 1<sup>st</sup> Place** in the Intern. Trading Agent Competition (TAC2010), Market Design Game 2010  
(Agent MerTACor with L. Stavrogiannis)
- 3<sup>rd</sup> Place** in the Intern. Trading Agent Competition, Ad Auctions Game 2010, 2013  
(Agent MerTACor with K. Chatzidimitriou)
- 5<sup>th</sup> Place** in the International Trading Agent Competition, Market Design Game 2008, 2009  
(Agent MerTACor with with L. Stavrogiannis)
- 1<sup>st</sup> Place** in the International Trading Agent Competition (TAC2005), Classic Game 2005  
(Agent MerTACor with D. Kehagias and P. Toulis)
- 3<sup>rd</sup> Place** in the International Trading Agent Competition (TAC2005), SCM Game 2005  
(Agent MerTACor with A. Symeonidis, K. Chatzidimitriou and I. Kontogounis)
- 5<sup>th</sup> Place** in the International Trading Agent Competition (TAC2006), Classic Game 2006  
(Agent MerTACor with D. Kehagias and P. Toulis)
- Marquis Who's Who in America, 55th Ed. 2001
- Marquis Who's Who in America Science and Engineering, 5th Ed. 2000-2001
- Strathmore's Who's Who 1998-1999

**1995 Engineering Dean's Council Award, Colorado State University**

1992 Outstanding Faculty Counselor for an IEEE Student Branch		IEEE - Region V
University Fellow	Syracuse University	9/88-5/89
Fellow	Bodossaki Foundation, Greece	9/85-8/88
Scholarship	Public Scholarship Foundation, Greece	1981-1985
Scholarship	Athenian Club, Greece	1980-1985

## CONFERENCES AND WORKSHOPS ORGANIZED

- *Sixth International Workshop on Agents and Data Mining Interaction (ADMI '10)*,  
**Co-chair** with L. Cao, A. Bazzan, V. Gorodetsky, G. Weiss, Toronto, Canada, May 11, 2010.
- *Fourth International ICSC Symposium on Information Technologies in Environmental Engineering (ITEE-2009)*,  
**Co-chair** with J. M. Gómez and I. Athanasiadis, Thessaloniki, Greece, May 28-29, 2009.
- *Agent and Data Mining Interaction (ADMI2007)*  
**Co-chair** with L. Cao and V. Gorodetsky  
Workshop in the 2007 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT-2007), Silicon Valley, California, Nov. 1-4, 2007.
- *Applications of Intelligent Agent and Data Mining technologies in the field of Concurrent Engineering*, **Co-chair** with A. Koumpis  
Special Track in the 10<sup>th</sup> ISPE International Conference on Concurrent Engineering (CE2003), Madeira, Portugal, July 26-30, 2003.
- *Conference on Three- and Four-Dimensional Optical Data Storage*  
**Co-chair** with Z. Hasan, H. Coufal, and S. Esener  
Part of the 46th SPIE International Symposium  
San Diego, California, July 29-August 3, 2001.
- *Conference on Advanced Optical Data Storage: Materials, Systems, and Interfaces to Computers*  
**Co-chair** with Z. Hasan, H. Coufal, and G. Sincerbox  
Part of the 44th SPIE International Symposium  
Denver, Colorado, July 18-23, 1999.
- *Conference on Advanced Optical Memories and Interfaces to Computer Storage*  
**Co-chair** with Prof. Zameer Hasan  
Part of the 43rd SPIE International Symposium, San Diego, California, July 19-24, 1998.
- *Optics in Communications and Computing*  
Special session in the 1998 International Conference on Telecommunications (ICT'98)  
**Co-chair** with Prof. Anura Jayasumana  
Porto Carras, Greece, June 22–25, 1998.
- *Workshop on Data Encoding for Page-oriented Optical Memories*  
**Chair**, Phoenix, Arizona, March 27-28, 1996.
- *The Potential of Optoelectronic Information Processing*  
**Chair**, Panel Session in the 1996 IEEE International Phoenix Conference on Computers and Communications (IPCCC'96), Phoenix, AZ, March 27-29, 1996.
- *Optoelectronic Computing Systems*  
**Chair**, Special Session in the Third International Conference on Electronics, Circuits, and Systems (ICECS'96), Rhodes, Greece, October 13-16 1996.

## CONFERENCE PROGRAM COMMITTEE MEMBER

- *2013 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'13)*, Atlanta, GA, USA, Nov. 17-20, 2013.

- *Trading Agent Design and Analysis Workshop (TADA-2013)*  
in Conjunction with AAI2013, Bellevue, WA, USA, July 14-15, 2013.
- *The Ninth International Workshop on Agents and Data Mining Interaction (ADMI 2013)*  
in Conjunction with AAMAS2013, Saint Paul, MI, USA, May 6-7, 2013.
- *2012 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'12)*,  
December 4-7, 2012, Macau SAR, China.
- *The Eighth International Workshop on Agents and Data Mining Interaction (ADMI-12)*  
in Conjunction with AAMAS2012, Valencia, Spain, June 4-8, 2012
- *2011 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'11)*,  
Lyon, France, Aug. 22-27, 2011.
- *Trading Agent Design and Analysis Workshop (TADA-2011)*  
in Conjunction with IJCAI2011, Barcelona, Spain, July 16, 2011.
- *5th International Symposium on Information Technologies in Environmental Engineering (ITEE 2011)*,  
Poznan, Poland, July 6-8, 2011.
- *2011 AAMAS Workshop on Agents and Data Mining Interaction (ADMI '11)*,  
Taipei, Taiwan, May 2-6, 2011.
- *IASTED International Conference on Artificial Intelligence and Applications (AIA 2011)*  
Innsbruck, Austria, Feb. 14-16, 2011.
- *14<sup>th</sup> Panhellenic Conference on Informatics (PCI 2010)*  
Tripoli, Greece, Sept. 10-12, 2010.
- *2010 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'10)*,  
Toronto, Canada, Aug. 31 - Sept. 3, 2010.
- *2010 AAMAS Workshop on Agents and Data Mining Interaction (ADMI '10)*,  
Toronto, Canada, May 10-14, 2010.
- *2009 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'09)*,  
Milan, Italy, Sept. 15-18, 2009.
- *13<sup>th</sup> Panhellenic Conference on Informatics (PCI 2009)*  
Corfu, Greece, Sept. 10-12, 2009.
- *2009 AAMAS Workshop on Agents and Data Mining Interaction (ADMI '09)*,  
Budapest, Hungary, May 11-15, 2009.
- *2008 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'08)*  
Sydney, Australia, Dec. 9-12, 2008.
- *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD 2008)*,  
Antwerp, Belgium, Sept. 15-19, 2008.
- *12<sup>th</sup> Panhellenic Conference on Informatics (PCI 2008)*  
Samos, Greece, Aug. 28-30, 2008.
- *IEEE Workshop on Engineering Open Complex Systems: Metasynthesis of Computing Paradigms (EOS-MCP 2008)*,  
in Conjunction with COMPSAC'08, Turku, Finland, July 28-Aug.1, 2008.
- *Trading Agent Design and Analysis Workshop (TADA-2008)*  
in Conjunction with AAI-08, Chicago, IL, USA, July 13-17, 2008.
- *7<sup>th</sup> International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS-08)*  
Estoril, Portugal, May 12-16, 2008
- *IASTED International Conference on Artificial Intelligence and Applications (AIA 2008)*  
Innsbruck, Austria, Feb. 11-13, 2008.
- *ICEITC 2007 International Conference*  
Chonbuk National University, South Korea, November 23-24, 2007.

- *10th International Conference on Engineering Applications of Neural Networks (EANN2007)*, Thessaloniki, Hellas, August 29-31, 2007.
- *International Workshop on Agent-Based Ubiquitous Computing (ABUC-07), in Conjunction with AAMAS2007*, Honolulu, Hawaii, May 14-18, 2007.
- *2<sup>nd</sup> International Workshop on Autonomous Intelligent Systems: Agents and Data Mining (AIS-ADM 2007)* St. Petersburg, Russia, June 3-6, 2007.
- *IASTED International Conference on Artificial Intelligence and Applications (AIA 2007)* Innsbruck, Austria, Feb. 12-14, 2007.
- *Workshop on "Interaction between Agents and Data Mining" (IADM-06)* Hong Kong, China, Dec. 18, 2006.
- *2006 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'06)* Hong Kong, China, Dec. 18-22, 2006.
- *Fourth European Workshop on Multi-Agent Systems (EUMAS'06)* Lisbon, Portugal, Dec. 14-15, 2006.
- *2nd International Conference on Semantics, Knowledge and Grid (SKG2006)* Guilin, China, Oct. 31- Nov. 3, 2006.
- *2006 Hellenic Data Management Symposium (HDMS2006)* Thessaloniki, Sept. 7-8, 2006.
- *Third European Workshop on Multi-Agent Systems (EUMAS 2005)* Brussels, Belgium, Dec. 7-8, 2005.
- *10<sup>th</sup> Panhellenic Conference in Informatics* Volos, Greece, Nov. 21-23, 2005.
- *Int. Workshop on Autonomous Intelligent Systems: Agents and Data Mining (AIS-ADM 2005)* St. Petersburg, Russia, June 6-8, 2005.
- *Second European Workshop on Multi-Agent Systems (EUMAS 2004)* Barcelona, Spain, Dec. 15-17, 2004.
- *First European Workshop on Multi-Agent Systems (EUMAS 2003)* Oxford, UK, Dec. 18-19, 2003.
- *9<sup>th</sup> Panhellenic Conference in Informatics* Thessaloniki, Greece, Nov. 21-23, 2003.
- *9<sup>th</sup> International Conference on Object-Oriented Information Systems (OOIS 2003)* Geneva, Switzerland, Sept. 2-5, 2003.
- *Optical Information Processing II*, Part of the 48th SPIE International Symposium San Diego, California, August 3-8, 2003.
- *International Conference on Communications in Computing (CIC 2000)* Las Vegas, Nevada, June 26-29, 2000.
- *Conference on Integrated Design and Process Technology* Dallas, Texas, June 4-8, 2000.
- *1999 International Workshop on Multimedia Database Management Systems* Blue Mountain Lake, New York, September 1-3, 1999.

## TUTORIALS

- T-1. *Knowledge Extraction for Improving Agent Efficiency* (Half day)  
with A. L. Symeonidis  
WI/IAT/ICDM'06  
Hong Kong, China, December 18, 2006.

- T-2. *Agent Intelligence through Data Mining* (Half day)  
with A. L. Symeonidis  
17th European Conference on Machine Learning and the 10th European Conference on Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD 2006)  
Berlin, Germany, September 18, 2006.
- T-3. *Software Agents in Environmental Informatics*  
with I. N. Athanasiadis  
IFIP Int'l Symposium on Environmental Software Systems (ISESS-05)  
Sesimbra, Portugal, May 2005.
- T-4. *Agent Intelligence through Data Mining* (Half day)  
IASTED International Conf. on Artificial Intelligence and Applications (AIA 2005)  
Innsbruck, Austria, February 14, 2005.
- T-5. *Data Mining and Agent Technology: Tools and techniques for dynamic infusion of intelligence* (Half day)  
with A. L. Symeonidis  
19th Annual ACM Symposium on Applied Computing (SAC 2004),  
Nicosia, Cyprus, March 14, 2004.
- T-6. *Data Mining: Tools and Techniques for Dynamic Infusion of Intelligence* (Half day)  
with A. L. Symeonidis  
10<sup>th</sup> ISPE International Conference on Concurrent Engineering: Research and Applications, July 31, 2003, Madeira, Portugal.
- T-7. *Parallel Architectures for Very Large Data/Knowledge Bases* (Full day)  
Thirteenth Annual IEEE International Phoenix Conference on Computers and Communications, April 12, 1994, Phoenix, AZ, USA.
- T-8. *Optical Storage and Processing for Very Large Databases* (Half day)  
Thirteenth Annual IEEE International Phoenix Conference on Computers and Communications, April 15, 1994, Phoenix, AZ, USA.

## LECTURES AND SEMINARS

- L-1. *Software Agents, Social Networks, and Semantic Web: Educating the Machine*  
NOESIS Center for the Sciences, Thessaloniki, **Greece**, Feb. 13, 2012.
- L-2. *Focusing on the Future of IT, panel discussion*  
16<sup>th</sup> Conference on IT Applications, Thessaloniki, **Greece**, Oct. 8-9, 2010.
- L-3. *e-Commerce and Electronic Auctions: Intelligent Agents for Electronic Transactions*  
Open University, Florina, **Greece**, March 15 2006.
- L-4. *Agent Intelligence through Data Mining*  
Colorado State University, Department of Electrical and Computer Engineering  
Fort Collins, Colorado, **USA**, April 22, 2005.
- L-5. *Multi-Agent Systems for Environmental Information Management: the case of the Cyprus Meteorological Radar*  
Colorado State University, Department of Electrical and Computer Engineering  
Fort Collins, Colorado, **USA**, April 22, 2005.
- L-6. *Agent Intelligence through Data Mining: Techniques for transferring knowledge from data to intelligent systems (invited lecture)*  
Kuwait University, Department of Electrical and Computer Engineering  
Kuwait City, **Kuwait**, February 23, 2005.
- L-7. *Multi-agent Systems for Environmental Information Management (invited lecture)*  
Kuwait University, Department of Electrical and Computer Engineering  
Kuwait City, **Kuwait**, February 22, 2005.



- L-8. *On Data Pumps and Knowledge Discovery*  
Seminar at the BEST Conference, Aristotle University of Thessaloniki  
Thessaloniki, **Greece**, October 5, 2004.
- L-9. *e-THMMY: A Web environment for supporting the Educational Process in the ECE Department*  
*1<sup>st</sup> Workshop on e-Learning, Univ. of Western Macedonia*  
Florina, **Greece**, May 16, 2004.
- L-10. *How many megabytes can I buy with 1€? The value of Information in the Electronic Era*  
Seminar at the BEST Conference, Aristotle University of Thessaloniki  
Thessaloniki, **Greece**, April 15, 2003.
- L-11. *"How many megabytes can 1 euro buy?" – The value of information in the electronic era*  
Rotary Club of Kalamaria, **Greece**, November 4 2002.
- L-12. *The value of information in the electronic era*  
Open University, Florina, **Greece**, November 11, 2001.
- L-13. *Photons and Electrons: A Symbiosis for Better Computers*  
Invited talk at the Second International Symposium on Electronics, ITESM,  
Chihuahua, **Mexico**, March 24, 2000.
- L-14. *Photons and Electrons: Can they Live Together?*  
Invited talk at the Second International Symposium on Electronics,  
Instituto Tecnológico y de Estudios Superiores de Monterrey, Queretaro campus,  
Santiago de Queretaro, Queretaro, **Mexico**, September 24, 1999.
- L-15. *Optical Data Storage and Processing for the Multimedia Environment of the Future*  
Invited talk at the 2nd International Symposium on Electronics,  
Instituto Tecnológico y de Estudios Superiores de Monterrey, Guadalajara campus,  
Guadalajara, **Mexico**, October 31, 1998.
- L-16. *Parallel Optoelectronic Techniques for Large Database Processing*  
Computer Engineering Department  
University of Patras, Patras, **Greece**, June 4, 1997.
- L-17. *Parallel Optical Memories for Storage and Processing of Digital and Analog Data*  
Institute of Electronic Structure and Laser  
Foundation for Research and Technology-Hellas, Heraklion, **Greece**, May 29, 1997.
- L-18. *Parallel Optical Memories for Storage and Processing of Large Databases*  
Department of Electronics and Computer Engineering  
Technical University of Crete, Chania, **Greece**, May 26, 1997.
- L-19. *Parallel Optical Memories for Storage and Processing of Digital and Analog Data*  
Department of Physics  
University of Patras, Patras, **Greece**, May 23, 1997.
- L-20. *Parallel Optical Memory Systems: Volume Holographic Storage and Optical Tape*  
Philips Research Labs, Eindhoven, **The Netherlands**, November 21, 1996.
- L-21. *Optoelectronic Devices and Systems for Digital Data Processing*  
A series of three seminars presented at the Lab for Photonic Computing and Perception  
Applied Physics Department (TW - TONA)  
Vrije Universiteit Brussel, Brussel, **Belgium**, September 4-6, 1996.
- L-22. *Digital Optical Computing: Reality and Expectations*  
Invited talk at the 5th International Symposium on Computer Systems and Electronics,  
Instituto Tecnológico y de Estudios Superiores de Monterrey, Toluca campus,  
Toluca, **Mexico**, September 23, 1995.

Pericles A. Mitkas

- L-23. *Optoelectronic Storage and Processing Techniques for Large Databases*  
Department of Electrical and Computer Engineering,  
University of Patras, Patras, **Greece**, September 1995.
- L-24. *Optoelectronic Computing Architectures for Non-numerical Processing*  
Workshop on Architectures for Smart Pixel Based Optoelectronic Systems,  
Colorado State University, Fort Collins, **USA**, December 1993.
- L-25. *Optical Computing*  
Fort Collins SERTOMA Club, **USA**, September 1993.
- L-26. *Optical Techniques for Database Processing*  
Department of Electrical and Computer Engineering,  
Aristotle University of Thessaloniki, Thessaloniki, **Greece**, July 1993.

## FUNDED RESEARCH PROJECTS

Funding Source	Role in project	Amount	Dates	Title
<b>Aristotle University of Thessaloniki and ITI-CERTH, Greece</b> (shaded rows indicate projects in ITI-CERTH)				
European Commission ICT Program CP	PI and Project Coordinator	<b>€2.473.542</b> (our part is ~€527.332)	11/2013- 10/2016	RAPP: Robotic Applications for Delivering Smart User Empowering Applications
Greek Ministry of Education	PI	€1.617.520	5/2012- 10/2014	Open Courses:Development and distribu- tion of digital course material
European Com- mission ICT Program STREP	PI and Project Coordinator	<b>€3.607.654</b> (our part is ~€668.600)	10/2011- 4/2014	CASSANDRA: A multivariate platform for assessing the impact of strategic decisions in electrical power systems
Greek Ministry of Education	PI	€108.679	4/2011-3/2012	Scientific and Technical Support of the School Network for 2011 in Thessaloniki, Serres and Pella Prefectures.
Sheep Breeding Associations	PI	€ 379,025	12/2009- 4/2013	AMNOS: An integrated system for the management of sheep breeding data
European Com- mission IST Program	PI and Project Coordinator	<b>€4,170,154</b> (our part was ~€789,480)	2006-2009	ASSIST: Association Studies Assisted by Inference and Semantic Technologies
Prefecture of Florina, Greece	PI	€ 99,500	10/2008- 4/2009	Telemedicine Applications for the Prefec- ture of Florina
General Secretar- iat of Research & Technology (GSRT)	PI	€ 184,192	2006-2008	PENED '03: Generalized framework and applications for the evaluation and improvement of intelli- gence in software agents
GSRT/CERTH	PI	€ 35,000	1/2005- 12/2006	Maintenance, improvement and upgrade of the Agent Academy platform
European Com- mission – IST program	PI and Project Coordinator	<b>€3,100,467</b> (our part was ~€880,000)	11/01-4/04	AGENT ACADEMY: A Data Mining Framework for Training Intel- ligent Agents
GSRT	PI	€ 305,200	9/2006-8/2008	Improvements in the Computer Engineering Curriculum at the Department of Electrical and Computer Engineering (Phase 2)
GSRT	PI	€ 167,164 € 770,390	3/2003-8/2006	Improvements in the Computer Engineering Curriculum at the Department of Electrical and Computer Engineering (Phase 1)
European Com- mission - INCO Program	Partner	€ 15,600	8/2004-7/2007	NOSTRUM-DSS: DSS Tools for sustainable water resource management in the Mediterranean.
GSRT	PI	€ 32,100	9/2003-	Advanced techniques for data mining and

Funding Source	Role in project	Amount	Dates	Title
			12/2005	knowledge discovery in biological databases
European Comm. IST Program	Subcontractor	€ 16,638	1/2003-9/2003	MUMMY: Mobile Knowledge Management
Sheep Breeding Association	Co-PI	€ 30,000	9/2002-12/2004	AMNOS: A web-based system for the management of genetic breeding data
<b>Colorado State University, USA</b>				
National Science Foundation	Co-PI	\$250,000	6/99-5/02	VCSEL Based Free-Space Processing System for a Biomolecular Database Scanner
DARPA	PI	\$98,168	9/97-3/99	Holographic Search Engine for Multimedia Databases
AFOSR	PI	\$281,835	2/94-6/97	Holographic Storage and Processing for Very Large Relational Databases
Rome Labs	PI	\$141,038	6/95-9/96	Error Detection and Correction Codes for Optical Memories with 2D Output
National Science Foundation	Co-PI	\$330,000	9/94-8/98	Optoelectronic Parallel Processing with Logic Gate Arrays based on Surface Emitting Lasers
NATO Collaborative Research grant	PI	BF192,000	9/96-11/97	Reference Beam Reconstruction during Associative Recall in Digital Holographic Memories
Symbios, Inc	PI	\$50,000 Equipment and services	4/97-10/97	Fabrication of a Smart Photodetector Array for Cluster Error Correction in 0.35mm CMOS Technology
Symbios, Inc	PI	\$50,000 Equipment and services	1/97-6/97	Fabrication of a VLSI Chip in 0.5mm CMOS Technology for Tomographic Sorting
Storage Technology Corp. and Colorado Advanced Technology Institute	PI	\$50,000 + \$13,970 Equipment	7/96-6/98	Volume Holographic Storage for Digital Data
	PI	\$50,000	7/94-6/96	Two-dimensional Parallel Read-out of Optical Tape
NSF Engineering Research Center on Optoelectronic Computing Systems	Participant  (only own funds reported)	\$71,350	5/97-4/98	Holographic Search Engine for Multimedia Databases
		\$223,700	5/94-4/97	OE 3D Non-numerical Processing: Algorithms and Architectures
		\$13,000	5/96-4/97	Parallel Data Storage and Processing for Advanced Displays
		\$68,000	5/93-4/94	Nonnumerical algorithms for a 3D computer
		\$85,000	5/91-4/93	Optical Storage and Processing for Very Large Relational Databases

Funding Source	Role in project	Amount	Dates	Title
Colorado Commission on Higher Education	Participant (only own funds reported)	\$80,000	7/94-6/97	Optoelectronics Center of Excellence Award
		\$23,000	1/97-6/97	
CASI Undergraduate Research Grants	PI	\$15,000	Equipment	OE Center of Excellence Award
		\$30,000	5/92-4/94	
Comlinear Corporation	PI	\$3,000	9/94-5/95	A Graphical User Interface for an Optical Systems Simulator
		\$3,000	9/93-5/94	An Expert System for Environmental Impact Assessment Applications
		\$8,000	6/92-12/93	High Speed Text Pattern Matching based on a Signal Microprocessor
		Equipment		

## OPEN SOURCE SOFTWARE

- AgentAcademy** available at <http://sourceforge.net/projects/agentacademy>  
 Agent Academy is a Java integrated development framework for creating agents or multi-agent systems. It supports the design of agent behaviours, reusable agent types, ontologies, and the insertion of rule-based reasoning, based on data mining techniques.  
 Development Status: 3 – Alpha  
 Intended Audience: Developers, Customer Service, Information Technology, Science/Research  
 License: GNU Library or Lesser General Public License (LGPL)  
 Operating System: OS Independent      Programming Language: Java  
 Topic: Artificial Intelligence, Software Development  
 Registered: 2003-06-27 06:45  
**Downloads/Installations worldwide: 521 (as of June. 1, 2005)**
- AA DataMiner** available at <http://sourceforge.net/projects/aadataminer/>  
 AA DataMiner is a Java library, based on the Weka API for knowledge analysis. It provides graphical tools for applying data mining techniques on XML data, enabling output in PMML format. It also introduces several new data mining techniques.  
 Registered: 2004-05-21 00:46  
**Downloads/Installations worldwide: 556 (as of June. 1, 2005)**
- FLR Classifier: Fuzzy Lattice Reasoning Classifier**  
 A data mining algorithm for knowledge representation and learning based on Fuzzy Lattices. (developed with I. Athanasiadis and V. Kaburlasos). The classifier code has been added to the open source Waikato Environment for Knowledge Analysis ([WEKA](#)).

## RESEARCH STUDENTS

### Graduate

Name	Thesis Title	Graduation Date
<b>Ph.D. completed</b>		
<b>Colorado State University</b>		
1. Maureen E. Schaffer	Smart photodetector arrays for error control in page-oriented optical memory <i>Senior Engineer at SYMBIOS Inc and President of Rest and Relaxation, LLC, Fort Collins, Colorado</i>	Spring '98
2. Leo J. Irakliotis	Interfaces between parallel optical memories and electronic computers <i>Dean of the College of Information Technology at Western Governors University, Chicago, IL.</i>	Spring 2000
3. Terry N. Garrett	Three-dimensional error-correcting codes for volume holographic data storage <i>Senior Engineer, Hewlett Packard, Texas</i>	Spring 2000
<b>Aristotle University of Thessaloniki</b>		
4. Andreas Symeonidis	Dynamic infusion of intelligence into multi-agent systems through data mining <i>Assistant Professor at the ECE Department, Aristotle Univ. of Thessaloniki</i>	Fall 2004
5. Ioannis Athanasiadis	A methodology for the development of agent-based systems in environmental applications <i>Assistant Professor at the ECE Department, Democritus Univ. of Thrace</i>	Spring 2005
6. Dionysis Kechagias	Bidding mechanisms based on historical data for agents participating in electronic auctions <i>Research Associate at CERTH-ITI</i>	Spring 2006
7. Alexander Batzios	Discovery and management of semantic data on the web <i>Chief Software Architect, Future Route, Startup, London, UK</i>	Spring 2009
8. Christos Dimou	Theory and tools for evaluating the performance of software agents and multi-agent systems <i>Visiting Lecturer of Software Engineering Universidad Carlos III de Madrid, Spain</i>	Spring 2010
9. Sotirios Diplaris	Advanced data mining techniques for biological databases <i>Research Associate at CERTH-ITI</i>	Spring 2010
10. Fotis Psomopoulos	Parallel data mining and analysis algorithms in a grid environment and applications in bioinformatics <i>Research Associate at CERTH-Institute of Applied Biosciences</i>	Spring 2010
11. Fani Tzima	Learning classifier systems for supervised classification problems <i>Research Associate at AUTH-Research Committee</i>	Fall 2011
12. Vivia Nikolaidou	Evaluation of multi-agent systems' performance in supply chain management applications <i>Software Developer, Collabora Ltd.</i>	Fall 2011
13. Kyriakos Chatzidimitriou	Reinforcement learning and evolutionary computing mechanisms for autonomous agents <i>Research Associate at CERTH-ITI</i>	Fall 2012

## Graduate

Name	Thesis Title	Graduation Date
14. Kostas Vavliakis	Crawling and Analysis of Web Social Media using Semantic Web Technologies	Spring 2013

## Ph.D. in progress

15. Antonis Chryssopoulos	Analysis and development of negotiation strategies in the power market using agent-based techniques and data mining	2014
16. Michael Tsapanos	Linked Open Data: Techniques and tools for linking, searching and managing data over the internet	2015
17. Manos Schinas	Event Detection in Web and Social Media Data	2016

## M.Sc. completed

### Colorado State University

1. Surya P. Sastry	High speed text search based on a programmable signal processor	Fall '93
2. Dimitris P. Maniatis	Three-dimensional optoelectronic architectures for computer arithmetic	Spring '94
3. Saleh Al-Harathi	Storage requirements of multimedia systems and optical memories	Fall '94
4. Brad Goertzen	Volume holographic storage for large relational databases	Fall '95
5. Alan Simone	Two-dimensional parallel readout of optical tape	Fall '96
6. Keith Richling	Characterization of associative data recall in volume holographic memories	Fall '97
7. R. M. K. Nirmala	Optoelectronic storage and processing for large biological databases	Spring '98
8. Mike Porter	Data recovery in volume holographic memory systems	Fall '98
9. Shengluan Zhong	Volume holographic storage and associative recall for multimedia databases	Fall '99
10. John Hutton	Optimization of page-oriented optical memories using simulation	Spring 2000
11. Joel Lurkins	Design and implementation of a tomographic sorting unit	Summer 2000

### Aristotle University of Thessaloniki

- For the ERASMUS-MUNDUS: M.Sc. program on 'Network and e-Business centered Computing'

12. Jun Hu	An intelligent agent for effective supply chain management	Spring '08
13. Avani Dixit	An ontology for intelligent agent performance evaluation	Spring '08
14. Ilona Iakovidou	Design and development of an autonomous stock trading agent	Fall '09
15. Djohan Wahyudi	Software agents for stock market trading	Spring '10

- For the M.Sc. program on 'Advanced Computer and Communication Systems'

16. Melina Efraimidou Mary Kanaki	Data mining on environmental data: Decision support for air quality in Attica	Spring '05
17. Elsa Mpompoli	Interoperability of medical information systems	Spring '07
18. Marina Riga	Knowledge extraction from air quality data: Prediction models for decision support at the operational level.	Fall '08
19. Dimitris Petridis	SNASim: A platform for simulating web communities	Summer '12

## **Undergraduate Students**

### **Colorado State University**

- Ten research undergraduate summer scholars of the Optoelectronic Computing Systems Center and one foreign exchange summer intern.
- One Undergraduate College of Engineering Scholar and One Undergraduate Minority Scholar.
- Seventeen Senior Design Projects.

### **Aristotle University of Thessaloniki**

- More than 80 Diploma Theses have been completed
- One foreign exchange summer intern

## **PATENTS and IPRs**

- P. A. Mitkas and J. Lurkins,  
“Tomographic Sorting Chip,” patent disclosure with Symbios Logic, Inc. 1998.
- I. Athanasiadis and P. A. Mitkas,  
“System for sensor interconnection and provision of processed information through the semantic diffusion of knowledge”  
Greek Patent Office, #1004936, July 2005.
- P. A. Mitkas, G. Banos, and Z. Abas,  
“AMNOS: An Integrated Web-Based Platform for Dairy Sheep Breeding Management”  
Rights reserved, 2005.

## **CONSULTING**

- *Ministry of Macedonia-Thrace* 2009  
Advisor to the Minister on Innovation and New Technologies
- *PBB Systems, Inc., Canastota NY* 1998  
Dynamic Data Mining using an Electro-optical Data Warehouse

## **CITATIONS**

- About 2000 citations in Publish or Perish (as of 31/10/2014)
- H-index = 22



## PUBLICATIONS AND CONFERENCE PAPERS

### Dissertation

- D-1. P. A. Mitkas, **On Relational Database Operations Implemented in Optics**, Ph.D. Dissertation, Syracuse University, 1990.

### Book

- B-1. A. L. Symeonidis and P. A. Mitkas, **Agent Intelligence through Data Mining**, 226 pages, 77 illus., Hardcover, ISBN: 0-387-24352-6, Springer, July 2005.

### Guest Editor of Special Issues

- GE-1. **IEEE Computer** (with Leo J. Irakliotis)  
Special issue on Optical Computing, published in February 1998.
- GE-2. **IEEE Intelligent Systems** (with L. Cao and V. Gorodetsky)  
Special issue on Agents and Data Mining, published in May/June 2009.

### Journal Publications

- J-1. P. B. Berra, A. Ghafoor, P. A. Mitkas, S. J. Marcinkowski, and M. Guizani, "**The Impact of Optics on Data and Knowledge Base Systems**," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 1, March 1989, pp. 111-132.
- J-2. P. A. Mitkas, P. B. Berra, and P. S. Guilfoyle, "**An Optical System for Full Text Search**," *ACM SIGIR Forum*, Vol. 23, Issue 1-2, Fall 1988/Winter 1989, pp. 98-107.
- J-3. P. B. Berra, A. Ghafoor, S. J. Marcinkowski, M. Guizani, and P. A. Mitkas, "**Optics and Supercomputing**," *Proceedings of IEEE*, Vol. 77, No. 12, Dec. 1989, pp. 1797-1815.
- J-4. P. A. Mitkas, "**Optical Computing: The Next Step?**" *IEEE Computing Futures*, March 1991, pp. 61-66.
- J-5. P. A. Mitkas and P. B. Berra, "**PHOEBUS: An Opto-Electronic Database Machine based on Parallel Optical Disks**," *Journal of Parallel and Distributed Computing*, Vol. 17, March 1993, pp. 230-244.
- J-6. P. A. Mitkas, S. A. Feld, F. Beyette, and C. W. Wilmsen, "**Optical Digital Comparison Unit for Equal-to, Less-than, and Greater-than Determination**," *Applied Optics*, Vol. 33, No. 5, 10 Feb. 1994, pp. 806-814.
- J-7. P. A. Mitkas, L. J. Irakliotis, F. R. Beyette, Jr., S. A. Feld, and C. W. Wilmsen, "**An Optoelectronic Data Filter for Selection and Projection**," *Applied Optics*, Vol. 33, No. 8, 10 March 1994, pp. 1345-1353.
- J-8. P. A. Mitkas and L. J. Irakliotis, "**Three-dimensional Optical Storage for Database Processing**," *Journal of Optical Memories and Neural Networks*, Vol. 3, No. 2, 1994, pp. 217-229.
- J-9. P. A. Mitkas and S. Sastry, "**Text Pattern Matching based on a High-speed Signal Processor**," *Electronics Letters*, Vol. 30, No. 11, May 26, 1994, pp. 837-838.
- J-10. F. R. Beyette, Jr., P. A. Mitkas, S. A. Feld, and C. W. Wilmsen, "**Bitonic Sorting using an Optoelectronic Recirculating Architecture**," *Applied Optics*, Vol. 33, No. 35, 10 Dec. 1994, pp. 8164-8172.
- J-11. L. J. Irakliotis, S. A. Feld, F. Beyette, Jr., P. A. Mitkas, and C. W. Wilmsen, "**Optoelectronic Parallel Processing Architectures with Surface-Emitting Lasers and Free Space Interconnects**," *IEEE Journal of Lightwave Technology*, Vol. 13, No. 6, June 1995, pp. 1074-1084.
- J-12. B. J. Goertzen and P. A. Mitkas, "**An Error Correcting Code for Volume Holographic Storage of a Relational Database**," *Optics Letters*, Vol. 20, No. 15, Aug. 1, 1995, pp. 1655-1657.
- J-13. B. J. Goertzen and P. A. Mitkas, "**Volume Holographic Storage for Large Relational Databases**," *Optical Engineering*, Vol. 35, No. 7, July 1996, pp. 1847-1853.
- J-14. B. J. Goertzen, K. G. Richling, and P. A. Mitkas, "**Implementation of a Volume Holographic Database System**," *Optical Review*, Vol. 3, No. 6A, Nov./Dec. 1996, pp. 385-387.

- J-15. L. J. Irakliotis and P. A. Mitkas, "Three-dimensional Tomographic Storage Scheme for Optoelectronic Implementation of Database Operations," *Journal of Optical Memories and Neural Networks*, Vol. 5, No. 3, 1996, pp. 155-169.
- J-16. F. R. Beyette, Jr., P. J. Stanko, E. M. Hayes, R. D. Snyder, S. A. Feld, P. A. Mitkas, and C. W. Wilmsen, "An Optoelectronic Recirculating Sorter based on CMOS/VCSEL Smart Pixel Arrays; Architecture and System Demonstration," *Optical Review*, Vol. 3, No. 6A, Nov./Dec. 1996, pp. 373-375.
- J-17. L. J. Irakliotis, C. W. Wilmsen, and P. A. Mitkas, "The Optical Memory/Electronic Computer Interface as a Parallel Processing Architecture," *Journal of Parallel and Distributed Computing*, Vol. 41, 1997, pp. 67-77.
- J-18. L. J. Irakliotis, P. Stanko, C. W. Wilmsen, and P. A. Mitkas, "Demonstration of a VCSEL-based Optoelectronic Look-up Table," *IEEE Photonics Technology Letters*, Vol. 9, No. 4, April 1997, pp. 502-504.
- J-19. F. R. Beyette, Jr., P. J. Stanko, S. A. Feld, P. A. Mitkas, C. W. Wilmsen, K. M. Geib, and K. D. Choquette "Demonstration and Performance of a Recirculating Sorter based on CMOS Logic and Vertical Cavity Surface Emitting Lasers," *Optical Engineering*, Vol. 37, No. 1, January 1998, pp. 312-319.
- J-20. G. Betzos and P. A. Mitkas, "Performance Evaluation of Massively Parallel Processing Architectures with Three-dimensional Optical Interconnections," *Applied Optics*, Vol. 37, No. 2, 10 January 1998, pp. 315-325.
- J-21. L.J. Irakliotis and P.A. Mitkas, "Optics: A maturing technology for better computing", *IEEE Computer*, Vol. 31, No. 2, pp. 36-37, Feb. 1998.
- J-22. P. A. Mitkas, G. Betzos, and L. J. Irakliotis, "Optical Processing Paradigms for Electronic Computers," *IEEE Computer*, Vol. 31, No. 2, February 1998, pp. 45-51.
- J-23. G. A. Betzos, M. S. Porter, J. F. Hutton, and P. A. Mitkas, "Optical Storage Interactive Simulator (OASIS): An Interactive Tool for the Analysis of Page-oriented Optical Memories," *Applied Optics*, Vol. 37, No. 26, 10 Sept. 1998, pp. 6115-6126.
- J-24. M. E. Schaffer and P. A. Mitkas, "Smart Photodetector Array for Page-oriented Optical Memory in 0.35- $\mu\text{m}$  CMOS," *IEEE Photonics Technology Letters*, Vol. 10, No. 6, June 1998, pp. 866-868.
- J-25. M. Schaffer and P. A. Mitkas, "Requirements and Constraints for the Design of Smart Photodetector Arrays for Page-oriented Optical Memories," *IEEE Journal of Selected Topics in Quantum Electronics*, Vol. 4, No. 5, Sept./Oct. 1998, pp. 856-865.
- J-26. A. Simone, P. A. Mitkas, and G. A. Betzos, "Two-dimensional Read-out of Optical Tape," *Journal of Optical Memory and Neural Networks*, Vol. 7, No. 3, pp. 161-170, 1998.
- J-27. G. Betzos, A. Laisne, and P. A. Mitkas, "Improved Associative Recall of Binary Data in Volume Holographic Memories," *Optics Communications*, 171, 15 Nov. 1999, pp. 37-44.
- J-28. P. A. Mitkas, "Holographic Associative Memory for Database Processing," invited paper, *Asian Journal of Physics*, Vol. 8, No. 4, Oct.-Dec. 1999, pp. 525-538.
- J-29. A. L. Symeonidis, D. Kehagias, and P. A. Mitkas, "Intelligent policy recommendations on enterprise resource planning by the use of agent technology and data mining techniques ", *Expert Systems with Applications*, Vol. 25, No. 4, Dec. 2003, pp. 589-602.
- J-30. P. A. Mitkas, D. Kehagias, A. L. Symeonidis, and I. N. Athanasiadis, "A Framework for Constructing Multi-Agent Applications and Training Intelligent Agents", *Lecture Notes in Computer Science*, Vol. 2935, pp. 96-109, Springer-Verlag, 2003.
- J-31. I. N. Athanasiadis and P. A. Mitkas, "An Agent-Based Intelligent Environmental Monitoring System," invited paper, *Management of Environmental Quality: An International Journal*, Vol. 15, No. 3, March 2004, pp. 238-249.
- J-32. I. N. Athanasiadis, A. K. Mentis, P. A. Mitkas, and Y. A. Mylopoulos, "A hybrid agent-based model for estimating residential water demand," *Simulation: Transactions of The Society for Modeling and Simulation International*, Vol. 81, No. 3, 2005, pp. 175-187.
- J-33. D. Kehagias, A. L. Symeonidis, and P. A. Mitkas, "Designing Pricing Mechanisms for Autonomous Agents based on Bid-Forecasting," *Electronic Markets: the International Journal of Electronic Commerce & Business Media*, Vol. 15, No. 1, 2005, pp. 38-52.

- J-34. I. N. Athanasiadis and P. A. Mitkas, "**Social influence and water conservation signals: an agent-based approach**," *IEEE Computing in Science and Engineering*, Vol. 7, No. 1, Jan./Feb. 2005, pp. 65-70.
- J-35. A. L. Symeonidis and P. A. Mitkas, "**A methodology for predicting agent behavior by the use of data mining techniques**," *Lecture Notes in Artificial Intelligence*, Vol. 3505, pp. 161-174, Springer-Verlag, May 2005.
- J-36. P. A. Mitkas, "**Knowledge discovery for training intelligent agents: Methodology, tools and applications**," invited paper, *Lecture Notes in Artificial Intelligence*, Vol. 3505, pp. 2-18, Springer-Verlag, May 2005.
- J-37. A. L. Symeonidis, S. Seroglou, E. Valtos, and P. A. Mitkas, "**Biotope: An Integrated Framework for Simulating Distributed Multiagent Computational Systems**," *IEEE Transactions on Systems, Man, and Cybernetics - Part A: Systems and Humans*, special issue on Self-organization in Distributed Systems Engineering, Vol. 35, No. 3, May 2005, pp. 420-432.
- J-38. S. Diplaris, A. L. Symeonidis, P.A. Mitkas, G. Banos, and Z. Abas, "**A decision-tree-based alarming system for the validation of national genetic evaluations**," *Computers and Electronics in Agriculture*, Vol. 52, Feb. 2006, pp. 21-35.
- J-39. A. L. Symeonidis, D. Kehagias, P. A. Mitkas, and A. Koumpis, "**Open Source Supply Chains**", *International Journal of Advanced Manufacturing Systems (IJAMS)*, Vol. 9, No. 1, 2006, pp. 33-42.
- J-40. V. G. Kaburlasos, I. N. Athanasiadis, and P. A. Mitkas, "**Fuzzy Lattice Reasoning (FLR) Classifier and its Application for Ambient Ozone Estimation**," *International Journal of Approximate Reasoning*, Vol. 45, May 2007, pp. 152-188.
- J-41. P. A. Mitkas, A. L. Symeonidis, D. Kehagias, and I. N. Athanasiadis, "**Application of Data Mining and Intelligent Agent Technologies to Concurrent Engineering**", *International Journal of Product Lifecycle Management*, Vol. 2, No. 2, pp. 173-186, 2007.
- J-42. C. Dimou, A. L. Symeonidis, and P. A. Mitkas, "**Evaluating Knowledge Intensive Multi-Agent Systems**", *Lecture Notes in Computer Science*, Vol. 4476, Springer, pp. 74-87, 2007.
- J-43. A. L. Symeonidis, I. N. Athanasiadis, and P. A. Mitkas, "**A retraining methodology for enhancing agent intelligence**", *Knowledge-based Systems*, Vol. 20, No. 4, pp. 388-396, 2007.
- J-44. A. L. Symeonidis, K. C. Chatzidimitriou, D. Kehagias, and P. A. Mitkas, "**A Multi-agent Infrastructure for Enhancing ERP system Intelligence**", *Scalable Computing: Practice and Experience*, Vol. 8, No. 1, 2007, pp. 101-114.
- J-45. A. Batzios, C. Dimou, A. L. Symeonidis, and P. A. Mitkas, "**BioCrawler: An Intelligent Crawler for the Semantic Web**", *Expert Systems with Applications*, Vol. 35, Issues 1-2, July-Aug. 2008, pp. 524-530.
- J-46. I. N. Athanasiadis and P. A. Mitkas, "**Knowledge Discovery for Operational Decision Support in Air Quality Management**", *Journal of Environmental Informatics*, Vol. 9, No. 2, June 2007, pp. 100-107.
- J-47. A. L. Symeonidis, K. C. Chatzidimitriou, I. N. Athanasiadis, and P. A. Mitkas, "**Data Mining For Agent Reasoning: A Synergy For Training Intelligent Agents**", *Engineering Applications of Artificial Intelligence*, Vol. 20, No. 8, Dec. 2007, pp. 1097-1111.
- J-48. A. L. Symeonidis, V. Nikolaidou, and Mitkas P. A., "**Sketching a Methodology for Efficient Supply Chain Management Agents Enhanced through Data Mining**", *International Journal of Intelligent Information and Database Systems*, Vol. 2, No. 1, 2008, pp. 49-68.
- J-49. P. A. Mitkas, V. Koutkias, A. L. Symeonidis, M. Falelakis, C. Diou, I. Lekka, A. Delopoulos, T. Agorastos, and N. Maglaveras, "**Association studies on cervical cancer facilitated by inference and semantic technologies: The ASSIST approach**", *Studies in Health Technology and Informatics*, Vol. 136, 2008, pp. 241-246.
- J-50. K. C. Chatzidimitriou, A. L. Symeonidis, I. Kontogounis, and P. A. Mitkas, "**Agent Mertacor: a Robust Design for dealing with Uncertainty and Variation in SCM Environments**", *Expert Systems with Applications*, Vol. 35, No. 3, Oct. 2008, pp. 591-603.
- J-51. T. Agorastos, V. Koutkias, M. Falelakis, I. Lekka, T. Mikos, A. Delopoulos, P. A. Mitkas, A. Tantsis, S. Weyers, P. Coorevits, A. M. Kaufmann, R. Kurzeja, and N. Maglaveras, "**Semantic Integration of Cervical Cancer Data Repositories to Facilitate Multicenter Association Studies: The ASSIST Approach**", *Cancer Informatics Journal*, Special Issue on Semantic Technologies, Vol. 8, Feb. 2009, pp. 31-44.

- J-52. J. M. Konstantinides, A. Mademlis, P. Daras, P. A. Mitkas, and M. G. Strintzis, "**Blind Robust 3-D Mesh Watermarking Based on Oblate Spheroidal Harmonics**," *IEEE Transactions on Multimedia*, Vol. 11, No. 1, Jan. 2009, pp. 23-38.
- J-53. C. Dimou, A. L. Symeonidis, and P. A. Mitkas, "**An integrated infrastructure for monitoring and evaluating agent-based systems**," *Expert Systems with Applications*, Vol. 36, No. 4, 2009, pp. 7360-7643.
- J-54. L. B. Cao, V. Gorodetsky, and P. A. Mitkas, "**Agent Mining: The Synergy of Agents and Data Mining**," expert opinion, *IEEE Intelligent Systems*, Vol. 24, No. 3, May-June 2009, pp. 64-72.
- J-55. F. Psomopoulos, P. A. Mitkas, C. Krinas, and I. Demetropoulos, "**A Grid-enabled Algorithm yields Figure-Eight Molecular Knot**," *Molecular Simulation*, Vol. 35, No. 9, Aug. 2009, pp. 725-736.
- J-56. I. N. Athanasiadis, M. Milis, P. A. Mitkas, and S. C. Michaelides, "**A Multi-agent System for Meteorological Radar Data Management and Decision Support**," *Environmental Modelling and Software*, Vol. 24, No. 11, Nov. 2009, pp. 1264-1273.
- J-57. A. Batzios and P. A. Mitkas, "**db4OWL: An Alternative Approach to Organizing and Storing Semantic Data**," *IEEE Internet Computing*, Vol. 13, No. 6, Nov.-Dec. 2009, pp. 48-55.
- J-58. G. Papachristoudis, S. Diplaris, and P. A. Mitkas, "**SoFoCles: Feature filtering for microarray classification based on Gene Ontology**," *Journal of Biomedical Informatics*, Vol. 43, No. 1, Feb. 2010, pp. 1-14, doi:10.1016/j.jbi.2009.06.002.
- J-59. F. Psomopoulos and P. A. Mitkas, "**Bioinformatics Algorithm Development for Grid Environments**," *Journal of Systems and Software*, Vol. 83, No. 7, July 2010, pp. 1249-1257. doi: 10.1016/j.jss.2010.01.051.
- J-60. K. Vavliakis, A. Symeonidis, G. Karagiannis, and P. A. Mitkas, "**An integrated framework for enhancing the Semantic Transformation, Editing and Querying of Relational Databases**," *Expert Systems with Applications*, Vol. 38, No. 4, April 2011, pp. 3844-3856.
- J-61. F. Tzima, D. Voukantsis, K. Karatzas and P. A. Mitkas, "**Sparse episode identification in environmental datasets: the case of air quality assessment**," *Expert Systems with Applications*, Vol. 38, No. 5, May 2011, pp. 5019-5027.
- J-62. A. Batzios and P. A. Mitkas, "**WebOWL: A Semantic Web search engine development experiment**," *Expert Systems with Applications*, Vol. 39, No. 5, April 2012, pp. 5052-5060.
- J-63. F. E. Psomopoulos and P. A. Mitkas, "**Multi Level Clustering of Phylogenetic Profiles**," *International Journal of Artificial Intelligence Tools*, special issue on Algorithms and Tools for Bioinformatics and Bio-engineering, Vol. 21, No. 5, Oct. 2012, p. 16, doi: 10.1142/S0218213012400234.
- J-64. F. Tzima, P. A. Mitkas, and J. B. Theocharis, "**Clustering-based initialization of Learning Classifier Systems: Effects on model performance, readability and induction time**," *Soft Computing*, Vol. 16, No. 7, July 2012, pp. 1267-1286.
- J-65. F. Tzima and P. A. Mitkas, "**Strength-based learning classifier systems revisited: effective rule evolution in supervised classification tasks**," *Engineering Applications of Artificial Intelligence*, Vol. 26, No. 2, Feb. 2013, pp. 818-832.
- J-66. F. E. Psomopoulos, P. A. Mitkas, and C. A. Ouzounis, "**Detection of genomic idiosyncrasies using fuzzy phylogenetic profiles**," *PLoS ONE*, 2013, 8(1), Art.# e52854.
- J-67. K. N. Vavliakis, T. K. Grollios, and P. A. Mitkas, "**RDOTE – Publishing Relational Databases into the Semantic Web**," *Journal of Systems and Software*, Vol. 86, No 1, Jan. 2013, pp. 89-99.
- J-68. K. C. Chatzidimitriou and P. A. Mitkas, "**Adaptive reservoir computing through evolution and learning**," *Neurocomputing*, Vol. 103, March 2013, pp. 198-209.
- J-69. C. Maramis, M. Falelakis, I. Lekka, C. Diou, P. A. Mitkas, and A. Delopoulos, "**Applying Semantic Technologies in Cervical Cancer Research**," *Data and Knowledge Engineering*, Vol. 86, July 2013, pp. 160-178.
- J-70. K. N. Vavliakis, A. L. Symeonidis, and P. A. Mitkas, "**Event Identification in Web Social Media through Named Entity Recognition and Topic Modeling**," accepted for publication in *Data and Knowledge Engineering*, 2013.

## Book Chapters

- BC-1. P. B. Berra, S. M. Chung, N. Hachem, P. A. Mitkas, and D. Shin, "**Computer Architecture for Very Large Knowledge Bases**," in Concepts and Characteristics of Knowledge-based Systems, ed. by M. Tokoro, Y. Anzai, and A. Yonezawa, Elsevier Science Publ. B.V. (North-Holland), 1989, pp. 225-248.
- BC-2. L. J. Irakliotis, G. Betzos, and P. A. Mitkas, "**Optical Associative Processors**," invited book chapter in Associative Processing and Processors, edited by A. Krikelis and C. Wheems, IEEE Computer Society Press, 1997, pp. 155-178.
- BC-3. N. A. Vainos, S. Mailis, G. Siganakis, A. Bonarou, V. Tornari, G. Betzos, and P. A. Mitkas, "**Dynamic Holographic Image Amplification and Projection: The Key to Optical Interfacing**," in Optics and Lasers in Biomedicine and Culture Series: Optics Within Life Sciences, Vol. 5, (OWLS-V), C. Fotakis, T. G. Papazoglou, C. Kalpouzou, (Eds.), 2000, Springer-Verlag, pp. 20-28.
- BC-4. P. A. Mitkas and G. Betzos, "**Photorefractive Volume Holographic Memories for Associative Storage and Processing in a Multimedia Environment**," in Unconventional Optical Elements for Information Storage, Processing and Communications, edited by E. Marom, N. A. Vainos, A. A. Friesem, and J. W. Goodman, Kluwer Academic Publishers, 2000, pp. 269-277.
- BC-5. P. A. Mitkas and G. W. Burr, "**Volume Holographic Optical Correlators**," invited book chapter in Holographic Data Storage, edited by H. Coufal, D. Psaltis, and G. Sincerbox, pp. 429-444, Springer Verlag, 2000.
- BC-6. V. Nikolaidou and P. A. Mitkas, "**Agents and Multi-Agent Systems in Supply Chain Management: An Overview**," in Agent and Web Service Technologies in Virtual Enterprises, edited by N. Protogeris, Idea Group Inc., pp. 223-243, 2007.
- BC-7. F. Tzima and P. A. Mitkas, "**Web Services Technology: An Overview**," in Agent and Web Service Technologies in Virtual Enterprises, edited by N. Protogeris, Idea Group Inc., pp. 25-44, 2007.
- BC-8. C. Dimou, A. L. Symeonidis, and P. A. Mitkas, "**Data Mining and Agent Technology: a Fruitful Symbiosis**," in Soft Computing for Knowledge Discovery and Data Mining, Eds. O. Maimon and L. Rokach, Springer, pp. 327-362, 2008.
- BC-9. F. E. Psoomopoulos and P. A. Mitkas, "**Data Mining in Proteomics using Grid Computing**," in the Handbook of Research on Computational Grid Technologies for Life Sciences, Biomedicine and Healthcare, edited by M. Cannataro, Information Science Reference, IGI Global, 2009, Chapter 13, pp. 245-267.
- BC-10. I. N. Athanasiadis and P. A. Mitkas, "**A Methodology for Developing Environmental Information Systems with Software Agents**," in Advanced Agent-Based Environmental Management Systems, Cortés, U. & Poch, M. (ed.) Whitestein Series in Software Agent Technologies and Autonomic Computing, vol.21, Birkhäuser, 2009, pp. 119-138.
- BC-11. P. Nikolaidou and P. A. Mitkas, "**Agents and Multi-Agent Systems in Supply Chain Management: An Overview**," in Strategic Information Systems: Concepts, Methodologies, Tools, and Applications, (4 Volumes), edited by M. Gordon Hunter, IGI Global, 2009, Chapter 56, pp. 867-886.
- BC-12. L. Stavrogiannis and P. A. Mitkas, "**Evaluation of Market Design Agents: The Mertacor Perspective**," in Agent-Mediated Electronic Commerce. Designing Trading Strategies and Mechanisms for Electronic Markets, Lecture Notes in Business Information Processing, Vol. 59, 2010, Springer, pp. 211-225.

## Conference Proceedings Edited

- CP-1 P. A. Mitkas, **Data Encoding for Page-oriented Optical Memories**, Proceedings of the 1996 Workshop, Colorado State University, College of Engineering, 1997.
- CP-2 P. A. Mitkas and Z. U. Hasan, **Advanced Optical Memories and Interfaces to Computer Storage**, Proceedings of SPIE, Vol. 3468, SPIE, 1998.
- CP-3 P. A. Mitkas, Z. U. Hasan, H. Coufal, and G. Sincerbox, **Advanced Optical Data Storage: Materials, Systems and Interfaces to Computers**, Proceedings of SPIE, Vol. 3802, SPIE, 1999.
- CP-4 I. N. Athanasiadis, P. A. Mitkas, A. E. Rizzoli, and J. C. Marx Gómez, **Information Technologies in Environmental Engineering**, Proceedings of the 4<sup>th</sup> International ICSC Symposium, Thessaloniki, Greece, May 28-29, 2009, Springer.

- CP-5 L. Cao, A. L.C. Bazzan, V. Gorodetsky, P. A. Mitkas, G. Weiss, and P. S. Yu, **Agents and Data Mining Interaction**, Revised Selected Papers from the Proceedings of the 6<sup>th</sup> International Workshop on Agents and Data Mining Interaction, Toronto, ON, Canada, May 11, 2010, Lecture Notes in Computer Science, Vol. 5980, 2010, Springer.

### Keynote Talks at Conferences

- K-1. P. A. Mitkas, "Association Studies and Medical Inferencing: The case of ASSIST," Keynote talk at the 7th International Symposium on Biological & Medical Data Analysis (ISBMDA2006), Thessaloniki, Greece, Dec. 7-8, 2006.
- K-2. A. Symeonidis, V. Nikolaidou, and P. A. Mitkas, "Exploiting Data Mining techniques for improving the efficiency of a Supply Chain Management agent," presented at the International Workshop on Intelligent Agents and Data Mining (IADM2006), Hong Kong, China, Dec. 18, 2006.
- K-3. P. A. Mitkas, "Training intelligent agents and evaluating their performance," presented at the International Workshop on Agents and Data Mining Interaction (ADMI2008), Sydney, Australia, Dec. 9, 2008.

### Invited Talks at Conferences

- I-1. L. J. Irakliotis, P. A. Mitkas, D. R. King, and P. D. Scholten, "Spatial Phase Classification of Chiral Models Using Adaptive Resonance Theory," invited paper, Sixth Summer Workshop and First Conference on Non-linear Systems, University of Patra, Patra, Greece, July 11-19, 1993. (Text in greek).
- I-2. L. J. Irakliotis and P. A. Mitkas, "Optical Memories," invited paper at the 10th National Conference on Lasers and Applications, Ioannina, Greece, September 21-23, 1994. (Text in greek).
- I-3. P. A. Mitkas, "Holographic Storage for Large Database Applications," presented at the International Symposium on Holographic Memories '96, Vouliagmeni, Greece, May 12-15, 1996.
- I-4. P. J. Stanko, F. R. Beyette, Jr., E. M. Hayes, R. D. Snyder, S. A. Feld, P. A. Mitkas, and C. W. Wilmsen, "An Optoelectronic Recirculating Sorter based on CMOS/VCSEL Smart Pixel Arrays; Architecture and System Demonstration," presented at the International Topical Meeting on Optical Computing, OC '96, April 21-25, 1996, Sendai, Japan.
- I-5. F. R. Beyette, Jr., P. A. Mitkas, M. Schaffer, E. Hayes, and C. W. Wilmsen, "Design and Evaluation of a Second Generation Optoelectronic Database Filter," presented at the 10th Meeting on Optical Engineering in Israel, Jerusalem, March 2-6, 1997.
- I-6. P. A. Mitkas, G. Betzos, M. Schaffer, M. S. Porter, and J. F. Hutton, "Optoelectronic Error Control for Page-oriented Optical Memories," presented at the 10th Meeting on Optical Engineering in Israel, Jerusalem, March 2-6, 1997.
- I-7. P. A. Mitkas, "Photorefractive Volume Holographic Memories for Associative Storage and Processing in a Multimedia Environment," presented at the First NATO-Mediterranean Dialogue Workshop on Unconventional Optical Elements for Information Storage, Processing and Communications, Kibbutz Qiryat-Anavim, Israel, October 19-21, 1998.
- I-8. P. A. Mitkas, "Holographic Associative Processing in a Multimedia Environment," presented at the Symposium on Photorefractive Holography and Applications, International Photonics Conference, Taipei, Taiwan, December 16-18, 1998, pp. 579-581.
- I-9. P. B. Berra, P. A. Mitkas, R. A. Liuzzi, and L. M. Duvall, "Knowledge Discovery and Data Mining Using an Electro-optical Data Warehouse," 2nd International Conf. on Information Fusion, Silicon Valley, CA, 6-8 July, 1999.
- I-10. P. Bruce Berra, P. A. Mitkas, and S. Zhong, "Fast and Efficient Searching of Multimedia Databases Using Holographic Memory," 11th IEEE International Conference on Tools with Artificial Intelligence, Chicago, Illinois, Nov. 8-11, 1999, pp. 365-372.
- I-11. P. A. Mitkas, "Spatial Light Modulators for Multimedia Database Processing," presented at the Conference on Spatial Light Modulators, 46th SPIE International Symposium on Optical Science, Engineering and Instrumentation, San Diego, California, July 29-August 3, 2001.

## Pericles A. Mitkas

- I-12. P. A. Mitkas, "Knowledge discovery for training intelligent agents," presented at the International Workshop on Autonomous Intelligent Systems: Agents and Data Mining (AIS-ADM 2005), St. Petersburg, Russia, June 6-8, 2005.
- I-13. P. A. Mitkas, "Semantic Inferencing for Improved Interoperability in Medical information Systems: The ASSIST Platform for Cervical Cancer," pHealth 2007, Porto Carras, Greece, June 20-22, 2007.
- I-14. P. A. Mitkas, "From Theory and the Research Lab to an Innovative Product for the Greek and the International Market: Agent MerTACor," 1<sup>st</sup> Private Equity Forum, 'Transforming the Crisis to Opportunities for Greece', Athens, Greece, Oct. 26, 2010.

## **Full-length Refereed Conference Publications**

- R-1. P. B. Berra, S. M. Chung, N. Hachem, P. A. Mitkas, and D. Shin, "An Architecture for Very Large Knowledge Bases," in Proceedings of IFIP WG 10.1 Workshop on Concepts and Characteristics of Knowledge-based Systems, Tokyo, Japan, November 1987.
- R-2. P. A. Mitkas, P. B. Berra, and P. S. Guilfoyle, "An Optical System for Full Text Search," in Proceedings of ACM SIGIR '89, 12th International Conference on R&D in Information Retrieval, Cambridge, MA, June 1989, pp. 98-107.
- R-3. P. A. Mitkas and P. B. Berra, "Implementation of Relational Database Operations in Optics," in the Proceedings of the 25-th Hawaiian International Conference on System Sciences (HICSS-25), Koloa HI, January 1992, Vol. 1, pp. 338-347.
- R-4. P. A. Mitkas and S. P. Sastry, "High-Speed Text Search based on a Programmable Signal Processor," in Proceedings of the 27-th Hawaiian International Conference on System Sciences (HICSS-27), Wailea, HI, January 1994, Vol. 2, pp. 283-292.
- R-5. P. A. Mitkas, F. R. Beyette, Jr., S. A. Feld, L. J. Irakliotis, and C. W. Wilmsen, "Optoelectronic Parallel Processing with Straight Pass Interconnections and Smart Pixel Arrays," in Proceedings of the First International Workshop on Massively Parallel Processing using Optical Interconnections, April 26-27, 1994, Cancun, Mexico, IEEE Computer Society Press, pp. 170-181.
- R-6. G. Betzos and P. A. Mitkas, "Performance Evaluation of 3D Optoelectronic Computer Architectures Based on FFT and Sorting Benchmarks," in Proceedings of the 2nd International Conf. on Massively Parallel Processing using Optical Interconnections, San Antonio, TX, October 23-24, 1995, IEEE Computer Society Press, pp. 160-167.
- R-7. L. J. Irakliotis and P. A. Mitkas, "Design Considerations for an Intelligent Optoelectronics Interface," in Proceedings of the 1996 IEEE International Phoenix Conference on Computers and Communications, IPCCC'96, Phoenix, AZ, March 27-29, 1996, pp. 434-438.
- R-8. G. A. Betzos and P. A. Mitkas, "3D Optoelectronic Computer Architectures for the Conjugate Gradient and Multigrid Benchmark Algorithms," in Proceedings of EuroPar'96, International Conference on Parallel Processing, Lyons, France, Aug. 27-29, 1996. Paper appears in *Lecture Notes in Computer Science*, Vol. 1124, pp. 457-460, Springer-Verlag, Berlin, 1996.
- R-9. G. A. Betzos, K. G. Richling, and P. A. Mitkas, "Optical Associative Processing for Multimedia Database Applications," in Proceedings of the 4th International Workshop on Multimedia DBMS, Dayton, OH, Aug. 5-7, 1998, IEEE Computer Society Press, pp. 190-197.
- R-10. D. Kechagias, A. Symeonidis, P. Mitkas "Towards improving Multi-Agent Simulation in safety management and hazard control environments", 2002 AI, Simulation and Planning in High Autonomous Systems - AIS'2002, 7-10 April, 2002, Lisbon, Portugal
- R-11. A. Symeonidis, P. Mitkas, D. Kechagias, "Mining patterns and rules for improving agent intelligence through an integrated multi agent platform", in Proc. of 6th IASTED International Conf. on Artificial Intelligence and Soft Computing (ASC 2002), 17-19 July, 2002, Banff, Alberta, Canada, pp. 48-53.
- R-12. I. N. Athanasiadis, V. G. Kaburlasos, P. A. Mitkas, and V. Petridis, "Applying Machine Learning Techniques on Air Quality Data for Real-Time Decision Support," in Proc. of the First International NAISO Symposium on Information Technologies in Environmental Engineering (ITEE'2003), 24-27 June 2003, Gdansk, Poland.

- R-13. P. A. Mitkas, D. Kehagias, A. L. Symeonidis, and I. N. Athanasiadis, "A Framework for Constructing Multi-Agent Applications and Training Intelligent Agents ", in Proc. of the 4<sup>th</sup> International Workshop on Agent-Oriented Software Engineering (AOSE-2003), held at Autonomous Agents & Multi-Agent Systems (AAMAS 2003), Melbourne, Australia - July 15, 2003, pp. 1-16.
- R-14. I. N. Athanasiadis, P. A. Mitkas, G. B. Laleci and Y. Kabak "Embedding data-driven decision strategies on software agents: The case of a Multi-Agent System for Monitoring Air-Quality Indexes" in Proc. of the 10<sup>th</sup> ISPE International Conference on Concurrent Engineering: Research and Applications, 26-30 July 2003, Madeira, Portugal, Vol. on Enhanced Interoperable Systems, pp. 23-30.
- R-15. P. A. Mitkas, A. L. Symeonidis, D. Kehagias, and I. Athanasiadis, "Application of Data Mining and Intelligent Agent Technologies to Concurrent Engineering ", in Proc. of the 10<sup>th</sup> ISPE International Conference on Concurrent Engineering: Research and Applications, 26-30 July 2003, Madeira, Portugal, Vol. on Enhanced Interoperable Systems, pp. 11-18.
- R-16. G. Banos, P. Mitkas, Z. Abas, A. Symeonidis, G. Milis, and U. Emanuelson, "Quality Control of National Genetic Evaluation Results Using Data-Mining Techniques; A Progress Report ", in the 2003 Proceedings of the Interbull Annual Meeting, Aug. 25-27, 2003, Rome, Italy, Vol. 31, pp. 8-15.
- R-17. G. Milis, A. Symeonidis, and P. A. Mitkas, "Ergasiognomon: A Model System of Advanced Digital Services Designed and Developed to Support the Job Marketplace," in Proc. of 9th Panhellenic Conference in Informatics, Nov. 21-23, 2003, Thessaloniki, Greece, pp. 388-401.
- R-18. G. Hatzidamianos, S. Diplaris, I. Athanasiadis, and P. A. Mitkas "GenMiner: A data mining tool for protein analysis", in Proc. of 9th Panhellenic Conference on Informatics, Nov. 21-23, 2003, Thessaloniki, Greece, pp. 346-360.
- R-19. D. Kehagias, K. Chatzidimitriou, A. L. Symeonidis, and P. A. Mitkas, "Information Agents Cooperating with Heterogeneous Data Sources for Customer-Order Management", in the 19th Annual ACM Symposium on Applied Computing (SAC 2004), Nicosia, Cyprus, March 14-17, 2004, pp. 52-57.
- R-20. I. N. Athanasiadis and P. A. Mitkas, "Supporting the decision-making process in environmental monitoring systems with knowledge discovery techniques," Proc. of the KDnet Symposium Knowledge Discovery for Environmental Management, Bonn, Germany, June 3-5, 2004, Vol. III, pp. 1-12.
- R-21. I. N. Athanasiadis and P. A. Mitkas, "Applying agent technology in environmental management systems under real-time constraints," Proceedings of the 2<sup>nd</sup> Biennial Meeting of the International Environmental Modelling and Software Society at "Environmental Informatics towards Citizen-centered Electronic Information Services" Workshop, Osnabruck, Germany, iEMSs, June 14-17, 2004, Vol. 2, pp. 531-536, **(Awarded the best student paper and presentation prize)**.
- R-22. I. N. Athanasiadis, P. Vartalas and P. A. Mitkas, "DAWN: A platform for evaluating water-pricing policies using a software agent society," Proceedings of the 2<sup>nd</sup> Biennial Meeting of the International Environmental Modelling and Software Society at "Environmental Decision Support Systems II" Workshop, Osnabruck, Germany, iEMSs, June 14-17, 2004, Vol. 2, pp. 643-648.
- R-23. F. Psomopoulos, S. Diplaris, and P. A. Mitkas, "A Finite State Automata Based Technique for Protein Classification Rules Induction," In Proceedings of the Second European Workshop on Data Mining and Text Mining for Bioinformatics, Pisa, Italy, September 2004, pp.54-60.
- R-24. A. L. Symeonidis, S. Seroglou, V. Valtos, and P. A. Mitkas, "An integrated multi-agent framework for simulating uncertain environments," Second European Workshop on Multi-Agent Systems (EUMAS-2004), Barcelona, Spain, Dec. 16-17, 2004, pp. 685-696.
- R-25. P. A. Mitkas, A. L. Symeonidis, and I. N. Athanasiadis. "A Retraining Methodology for Enhancing Agent Intelligence," IEEE Int'l Conference on Integration of Knowledge Intensive Multi-Agent Systems (KIMAS-05), Waltham, MA, USA, April 18-21, 2005, pp. 422-428.
- R-26. D. Kehagias and P. A. Mitkas, "Adaptive Pricing Functions for Open Outcry Auctions," in Proc. of the 2005 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'06), Compiegne, France, Sept. 19-22, 2005.
- R-27. C. Dimou and P. A. Mitkas, "Biogrid: An Agent-based Metacomputing Ecosystem," in Proc. of 10th Panhellenic Conference on Informatics, Nov. 11-13, 2005, Volos, Greece, pp. 88-98.



- R-28. S. Diplaris, G. Tsoumakas, P. A. Mitkas and I. Vlahavas, "Protein Classification with Multiple Algorithms," 10th Panhellenic Conference on Informatics, Volos, Greece, Nov. 11-13, *Lecture Notes in Computer Science*, Vol. 3746, Springer, 2005, pp. 448-456.
- R-29. D. G. Eliades, A. L. Symeonidis and P. A. Mitkas, "GeneCity: A multi-agent simulation environment for hereditary diseases," Proc. of the 4<sup>th</sup> ACS/IEEE International Conference on Computer Systems and Applications (AICCSA-06), Dubai/Sharjah, UAE, March 8-11, 2006, pp. 529-536.
- R-30. P. Toulis, D. Kehagias, and P. A. Mitkas, "A Long-Term Profit Seeking Strategy for Continuous Double Auctions in a Trading Agent Competition," Proc. of 4th Hellenic Conference on Artificial Intelligence (SETN'06), Heraklion, Crete, Greece, May 18-20, 2006. Paper appears in *Lecture Notes in Computer Science* (LNCS), Vol. 3955, Springer, pp. 116-126.
- R-31. I. Kontogounis, K. C. Chatzidimitriou, A. L. Symeonidis, and P. A. Mitkas, "A Robust Agent Design for Dynamic SCM Environments," Proc. of 4th Hellenic Conference on Artificial Intelligence (SETN'06), Heraklion, Crete, Greece, May 18-20, 2006. Paper appears in *Lecture Notes in Computer Science* (LNCS), Vol. 3955, Springer, pp. 127-136.
- R-32. P. Toulis, D. Kehagias, and P. A. Mitkas, "Mertacor: A Successful Autonomous Trading Agent", Proc. of the Fifth International Joint Conference on Autonomous Agents & Multi Agent Systems (AAMAS-06), Hakodate, Japan, May 8-12, 2006, pp. 1191-1198.
- R-33. Ch. Collyda, S. Diplaris, P. A. Mitkas, N. Maglaveras and C. Pappas, "Fuzzy Hidden Markov Models: A New Approach In Multiple Sequence Alignment," Proc. of the 20th International Congress of the European Federation for Medical Informatics (MIE 2006), A. Hasman et al. (Eds.), IOS press, Studies in Health Technology and Informatics, Vol. 124, pp. 99-104, Maastricht, Netherlands, Aug. 27-30, 2006.
- R-34. I. N. Athanasiadis, K. D. Karatzas, and P. A. Mitkas, "Classification techniques for air quality forecasting," Proc. of BESAI 2006 - 5th ECAI Workshop on Binding Environmental Sciences and Artificial Intelligence, Oprea M., Sances-Marre M. and Wotawa F., eds., part of the 17th European Conference on AI, Riva del Garda, Italy, Aug. 29, 2006, pp. 4-1 to 4-7.
- R-35. C. Dimou, A. Batzios, A. Symeonidis, and P. A. Mitkas, "A Multi-Agent Simulation Framework for Spiders Traversing the Semantic Web," Proc. of 2006 IEEE/WIC/ACM International Conference on Web Intelligence (WIC'06), Hong Kong, China, Dec. 18-22, pp. 736-739, 2006.
- R-36. C. Dimou, A. L. Symeonidis, and P. A. Mitkas, "Towards a Generic Methodology for Evaluating MAS Performance," IEEE International Conference on Integration of Knowledge Intensive Multi-Agents Systems, (KIMAS'07), Waltham, MA, April 29 - May 3, pp. 174-179, 2007.
- R-37. F. Tzima, A. L. Symeonidis, and P. A. Mitkas, "Symbiosis: Using Predator-Prey Games as a Test Bed for Studying Competitive Co-evolution," IEEE International Conference on Integration of Knowledge Intensive Multi-Agents Systems, (KIMAS'07), Waltham, MA, April 29 - May 3, pp. 115-120, 2007.
- R-38. F. Tzima, K. Karatzas, P. A. Mitkas, and S. Karathanasis, "Using data-mining techniques for PM10 forecasting in the metropolitan area of Thessaloniki, Greece," International Joint Conference on Neural Networks (IJCNN 2007), Orlando, FL, Aug. 12-17, 2007, pp. 2752-2757.
- R-39. Ch. Collyda, S. Diplaris, P. A. Mitkas, N. Maglaveras, and C. Pappas, "Enhancing the Quality of Phylogenetic Analysis using Fuzzy Hidden Markov Model Alignments," 12th International Health (Medical) Informatics Congress (MEDINFO 2007), Brisbane, Australia, Aug. 20-24, 2007. In Proc. MEDINFO 2007, K. Kuhn et al. (Edts), IOS Press, vol. 12(2), pp. 1245-1249, 2007.
- R-40. C. Dimou, A. L. Symeonidis, and P. A. Mitkas. "An agent structure for evaluating micro-level MAS performance", Proc. of the 7th Workshop on Performance Metrics for Intelligent Systems (PerMIS-07), Gaithersburg, MD, USA, Aug. 28-30, 2007, pp. 243-250.
- R-41. P. Tsimpos, S. Diplaris, P.A. Mitkas, and G. Banos, "Mendelian sampling mining and cluster monitoring of national genetic evaluation data with the AGELI software platform," Proc. 2007 Interbull Annual Meeting, Dublin, Ireland, Aug. 23-26, 2007, Vol. 37, pp. 73-77.
- R-42. K. Vavliakis, A. L. Symeonidis, G. Karagiannis, and P. A. Mitkas, "Eikonomia – An Integrated Semantically Aware Tool for Description and Retrieval of Byzantine Art", 19th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2007), Patras, Greece, Oct. 29–31, 2007, IEEE Computer Society, Vol. 2, pp. 279-282.

- R-43. P. A. Mitkas, V. Koutkias, A. Symeonidis, C. Diou, I. Lekka, M. Falelakis, A. Delopoulos, T. Agorastos, and N. Maglaveras, "Association Studies on Cervical Cancer Facilitated by Inference and Semantic Technologies: The ASSIST Approach," in Proc. of MIE 2008, Göteborg, Sweden, May 25-28, 2008, pp. 241-246.
- R-44. C. Dimou, K. C. Chatzidimitriou, A. L. Symeonidis, and P. A. Mitkas. "Creating and Reusing Metric Graphs for Evaluating Agent Performance in the Supply Chain Management Domain," First Workshop on Knowledge Reuse (KREUSE'2008), 10<sup>th</sup> ICSR, Beijing, China, May 23-29, 2008.
- R-45. P. Mitkas, C. Maramis, A. Delopoulos, A. Symeonidis,, S. Diplaris, M. Falelakis, F. Psomopoulos, A. Batzi-os, N. Maglaveras, I. Lekka, V. Koutkias, T. Agorastos, T. Mikos, and A. Tatsis, "ASSIST: Employing Inference And Semantic Technologies To Facilitate Association Studies On Cervical Cancer," in Proc. of 6th European Symposium on Biomedical Engineering, Chania, Greece, June 19-21, 2008.
- R-46. K. C. Chatzidimitriou, A. L. Symeonidis, and P. A. Mitkas. "Data Mining-Driven Analysis and Decomposition in Agent Supply Chain Management Networks," Proceedings of International Workshop on Agents and Data Mining Interaction (ADMI2008), Sydney, Australia, Dec. 9, 2008, pp. 558-561.
- R-47. C. Dimou, M. Falelakis, A. Symeonidis, A. Delopoulos, and P. A. Mitkas, "Constructing Optimal Fuzzy Metric Trees for Agent Performance Evaluation," Proc. of 2008 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, (WI-IAT'08), Sydney, Australia, Dec. 10-12, 2008, pp. 336-339.
- R-48. F. Tzima and P. A. Mitkas, "ZCS Revisited: Zeroth-level Classifier Systems for Data Mining," Proc. of the 2008 IEEE International Conference on Data Mining Workshops (ICDM 2008), Workshop on Foundations of Data Mining, Pisa, Italy, Dec. 12-15, pp. 700-709, 2008.
- R-49. M. Riga, F. A. Tzima, K. Karatzas, and P. A. Mitkas, "Development and Evaluation of Data Mining Models for Air Quality Prediction in Athens, Greece," Proc. of 4<sup>th</sup> International Symposium on Information Technologies in Environmental Engineering (ITEE-09), Thessaloniki, Greece, May 28-29, 2009, pp. 331-344, Springer.
- R-50. F. A. Tzima, H. Niska, M. Kolehmainen, K. D. Karatzas, and P. A. Mitkas, "An Experimental Evaluation of ZCS-DM for the Prediction of Urban Air Quality," Proc. of 4<sup>th</sup> International Symposium on Information Technologies in Environmental Engineering (ITEE-09), Thessaloniki, Greece, May 28-29, 2009, pp. 291-304, Springer.
- R-51. A. C. Chrysopoulos, A. L Symeonidis, and P. A. Mitkas, "Improving agent bidding in Power Stock Markets through a data mining enhanced agent platform," Proceedings of International Workshop on Agents and Data Mining Interaction (ADMI2009), Budapest, Hungary, May 10-15, 2009. Paper appears in *Lecture Notes in Computer Science*, Vol. 5680, Springer, pp. 111-125.
- R-52. V. Nikolaidou and P. A. Mitkas, "A sequence mining method to predict the bidding strategy of trading agents," Proceedings of International Workshop on Agents and Data Mining Interaction (ADMI2009), Budapest, Hungary, May 10-15, 2009. Paper appears in *Lecture Notes in Computer Science*, Vol. 5680, Springer, pp. 139-151.
- R-53. C. Dimou, F. Tzima, A. Symeonidis, and P. Mitkas, "Specifying and Validating the Agent Performance Evaluation Methodology: The Symbiosis Use Case," Proc. of IADIS International Conference on Intelligent Systems and Agents 2009, Algarve, Portugal, June 17-23, 2009, pp. 125-132.
- R-54. J. E. Psaroudakis, F. A. Tzima, and P. A. Mitkas, "EVADING: An Evolutionary Algorithm with Dynamic Niching for Data Classification," Proceedings of the 2009 International Conference on Genetic and Evolutionary Methods (GEM'09), Las Vegas, NV, USA, July 13-16, 2009, CSREA Press, pp. 59-65.
- R-55. L. Stavrogiannis and P.A. Mitkas, "CAT 2008 Post-Tournament Evaluation: The Mertacor's Perspective," Workshop on Trading Agent Design and Analysis (TADA-09) in IJCAI-09, Pasadena, CA, USA, July 13, 2009.
- R-56. M. Falelakis, C. Maramis, I. Lekka, P. A. Mitkas, and A. Delopoulos, "An Ontology for Supporting Clinical Research on Cervical Cancer," International Conference on Knowledge Engineering and Ontology Development (KEOD 2009), Madeira, Portugal, October 6-8, 2009, pp. 103-108.
- R-57. L. Stavrogiannis and P. A. Mitkas, "Software Agents in Multiple Adaptive Double Auction Markets," Proc. of 13<sup>th</sup> Panhellenic Conference on Informatics (PCI '09), Corfu, Greece, Sept. 10-12, 2009, IEEE Computer Society Press, pp. 48-52.

- R-58. F. E. Psomopoulos and P. A. Mitkas, "Multi Level Clustering of Phylogenetic Profiles," in Proc. of the 10<sup>th</sup> International IEEE Conference on Bioinformatics and Bioengineering (IEEE BIBE 2010), Philadelphia, PA, USA, May 31 – June 3, 2010, pp. 308-309.
- R-59. L. Stavrogiannis and P. A. Mitkas, "Mertacor 2009 Demystified: Strategies and Guidelines for Market Design in TAC," Proc. of ACM EC 2010 Workshop on Trading Agent Design and Analysis (TADA 2010), Cambridge, MA, June 7, 2010.
- R-60. K. C. Chatzidimitriou and P. A. Mitkas, "A NEAT Way for Evolving Echo State Networks", Proc. of the 19<sup>th</sup> European Conference on Artificial Intelligence (ECAI 2010), Lisbon, Portugal, Aug. 16-20, 2010, IOS Press, pp. 909-914.
- R-61. A. Symeonidis and P. Mitkas, "Monitoring Agent Communication in Soft Real-time Environments," in Proc. of 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'10), Toronto, Canada, Aug. 31-Sept. 3, 2010, Vol. 2, pp. 265-268.
- R-62. K. Vavliakis, A. Symeonidis, and P. Mitkas, "Towards Understanding How Personality, Motivation and Events Trigger Web User Activity," in Proc. of 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'10), Toronto, Canada, Aug. 31-Sept. 3, 2010, Vol. 1, pp. 615-618.
- R-63. K. N. Vavliakis, T. K. Grollios, and P. A. Mitkas, "RDOTe - Transforming Relational Databases into Semantic Web Data," presented at the 9<sup>th</sup> International Semantic Web Conference (ISWC2010), Shanghai, China, Nov. 8-11, 2010.
- R-64. V. Nikolaidou and P. A. Mitkas, "Measuring the specialization of agents in a multi-agent system using entropy and complexity," Proc. of 11<sup>th</sup> IASTED International Conference on Artificial Intelligence and Applications (AIA 2011), Vol. 718: Modelling, Identification and Control, Innsbruck, Austria, Feb. 14-16, 2011, pp. 210-217.
- R-65. K. C. Chatzidimitriou, A. C. Chrysopoulos, A. Symeonidis, and P. Mitkas, "Enhancing Agent Intelligence through Evolving Reservoir Networks for Power Load and Settlement Price Predictions in Power Stock Markets," Proc. of the 7th International Workshop on Agents and Data Mining Interaction (ADMI2011), Taipei, Taiwan, May 2, 2011. Appears in *Lecture Notes in Artificial Intelligence*, (LNAI), Vol. 7103, 2012, pp. 228-247.
- R-66. K. N. Vavliakis, K. Gemenetzi, and P. A. Mitkas, "A Correlation Analysis of Social Media," Proc. of the International Conference on Web Intelligence, Mining and Semantics (WIMS'11), Songdal, Norway, May 25-27, 2011, paper #54.
- R-67. K. C. Chatzidimitriou, L. Stavrogiannis, A. L. Symeonidis, and P. A. Mitkas, "An Adaptive Proportional Value per Click Agent for Bidding in Ad Auctions," Proc. of IJCAI 2011 Workshop on Trading Agent Design and Analysis (TADA 2011), Barcelona, Spain, July 17, 2011. Appears in *Lecture Notes in Business Information Processing* (LNBIP), Vol. 119, 2013, pp. 15-27.
- R-68. M. Tsapanos, K. C. Chatzidimitriou, and P. A. Mitkas, "Combining Zeroth-Level Classifier System and Eligibility Traces for Real Time Strategy Games," Proc. of 2011 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'11), Lyons, France, Aug. 22-27, 2011, Vol. 2, pp. 244-247.
- R-69. K. Chatzidimitriou, I. Partalas, P. A. Mitkas, and I. Vlahavas, "Transferring Evolved Reservoir Features in Reinforcement Learning Tasks," in Proc. of the 9<sup>th</sup> European Workshop on Reinforcement Learning (EWRL 2011), Athens, Greece, Sept. 9-11, 2011. Appears in *Lecture Notes in Artificial Intelligence*, (LNAI), Vol. 7188, 2012, pp. 213-224.
- R-70. Z. Alepidou, K. N. Vavliakis, and P. A. Mitkas, "A Semantic Tag Recommendation Framework for Collaborative Tagging Systems," in Proc. of the 3<sup>rd</sup> IEEE International Conference on Social Computing (Social-Com'11), Cambridge, MA, USA, Oct. 9-11, 2011, pp. 633-636.
- R-71. A.L. Symeonidis, P. Toulis, and P.A. Mitkas, "Supporting Agent-Oriented Software Engineering for Data Mining enhanced Agent Development," Proc. of the 2012 Agents and Data Mining Interaction workshop – (ADMI 2012), at the 2012 Conference on Autonomous Agents and Multi-agent Systems (AAMAS), June 5, 2012, Valencia, Spain. Appears in *Lecture Notes in Computer Science*, Vol. 7607, 2013, pp 7-21.
- R-72. K. C. Chatzidimitriou, A. L. Symeonidis, and P. A. Mitkas, "Policy Search through Adaptive Function Approximation for Bidding in TAC SCM," Proc. of Joint Workshop on Trading Agent Design and Analysis

- (TADA 2012) and Agent Mediated Electronic Commerce (AMEC) 2012, held in conjunction with the Autonomous Agents and Multi-agent Systems (AAMAS), June 5, 2012, Valencia, Spain, pp. 16-29.
- R-73. A. Papadopoulos, K. Toumpas, A. Chrysopoulos, and P. A. Mitkas, "Exploring Optimization Strategies in Board Game Abalone for Alpha-Beta Search," in Proc. of the IEEE Conference on Computational Intelligence and Games (CIG), Granada, Spain, Sept. 11-14, 2012, pp. 63-70.
- R-74. D. M. Vitsios, F. E. Psoomopoulos, P. A. Mitkas, and Ch. A. Ouzounis: "Multi-genome Core Pathway Identification through Gene Clustering", 1st Workshop on Algorithms for Data and Text Mining in Bioinformatics (WADTMB 2012) in conjunction with the 8th AIAI, 27-30 September 2012, Halkidiki, Greece. Paper appears in *Lecture Series IFIP 2012, Advances in Information and Communication Technology*, AIAI (Artificial Intelligence Applications and Innovations), Eds.: L. Iliadis et. al., Vol. 382, Springer, Heidelberg, pp. 545-555.
- R-75. M. Allamanis, F. Tzima, and P. A. Mitkas, "Effective Rule-based Multi-Label Classification with Learning Classifier Systems," Proc. of 11<sup>th</sup> International Conference on Adaptive and Natural Computing Algorithms (ICANNGA '13), April 4-6, 2013, Lausanne, Switzerland. Paper appears in *Lecture Notes in Computer Science*, Vol. 7824, 2013, Springer, pp. 466-476.
- R-76. K. C. Chatzidimitriou, K. N. Vavliakis, A. L. Symeonidis, and P. A. Mitkas, "Redefining the market power of small-scale electricity consumers through Consumer Social Networks," Proc. of the 10<sup>th</sup> IEEE International Conference on E- Business Engineering (ICEBE 2013), Sept. 11-13, 2013, Coventry, UK.
- R-77. A. Chrysopoulos, C. Diou, A. L. Symeonidis, and P. A. Mitkas, "Agent-based small-scale energy consumer models for energy portfolio management," Proc. of 2013 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'13), Nov. 17-20, 2013, Atlanta, GA, USA.

### **Contributed Conference Presentations**

- C-1. P. B. Berra and P. A. Mitkas, "An Initial Design for a Very Large Knowledge Base Architecture," in Proceedings of EURINFO '88, May 1988, Athens, Greece, pp. 686-692.
- C-2. P. A. Mitkas, "Memory Requirements of Very Large Databases," invited paper in 3-D Memory Workshop, March 18-20, 1990, Snowbird, UT.
- C-3. P. S. Guilfoyle, P. A. Mitkas, and P. B. Berra, "Digital Opto-Electronic Computer for Textual Pattern Matching," in Proceedings of SPIE Tech. Symp. on Optical Engineering and Photonics in Aerospace Sensing, Orlando, FL, 16-20 April 1990.
- C-4. P. A. Mitkas and P. B. Berra, "An Optical Processing Unit for Relational Database Operations," Proceedings of OSA Optical Computing Technical Meeting, Salt Lake City, UT, March 1991, pp. 100-103.
- C-5. P. A. Mitkas and P. B. Berra, "An Optical Relational Database Filter," presented at the 1992 ICO Topical Meeting on Optical Computing, Minsk, Belarus, June 1992. Appears at the Proceedings of Optical Computing '92, SPIE Vol. 1806, pp. 518-529, 1993.
- C-6. P. A. Mitkas and P. B. Berra, "Parallel Optical Memories for Very large Databases," 37th SPIE International Symposium on Optical Applied Science and Engineering, Conference on Very Large Optical Memories, San Diego, CA, July 1992. Appears at the Proceedings on Photonics for Computers, Neural Networks, and Memories, SPIE Vol. 1773, pp. 377-387, 1992.
- C-7. P. A. Mitkas and D. Spence, "OPSSIM: An Optical Systems Simulator," Proceedings of the 1993 SCS Western Simulation Multiconference on Simulation in Engineering Education, La Jolla, CA, Jan. 1993, SCS Simulation Series, Vol. 25, No. 3, pp 192-197.
- C-8. J. Brown, L. J. Irakliotis, and P. A. Mitkas, "Volume Holographic Storage and Processing for Large Databases," Proceedings of the OSA Topical Meeting on Optical Computing, Vol. 7, Palm Springs, CA, March 1993, pp. 54-57.
- C-9. P. A. Mitkas, S. A. Feld, L. J. Irakliotis, and C. W. Wilmsen, "An Optical Data Filter for Selection and Projection," Proceedings of the OSA Topical Meeting on Optical Computing, Vol. 7, Palm Springs, CA, March 1993, pp. 172-175.
- C-10. L. J. Irakliotis, P. A. Mitkas, D. R. King, and P. D. Scholten, "Spin Pattern Recognition using Adaptive Resonance Theory," Proceedings of World Congress on Neural Networks, Portland, OR, July 1993.

Pericles A. Mitkas

- C-11. F. R. Beyette, Jr., S. A. Feld, K. Geib, L. J. Irakliotis, P. A. Mitkas, and C. W. Wilmsen, "Optical Parallel Compare-and-Exchange Module based on HPT/VCSEL Smart Pixels," Proceedings of the Annual IEEE LEOS Conference, San Jose, CA, 15-18 Nov. 1993, pp. 676-677.
- C-12. P. A. Mitkas, L. J. Irakliotis, F. R. Beyette, Jr., S. A. Feld, and C. W. Wilmsen, "Optoelectronic Look-Up Table using VCSEL-based Logic," Proceedings of the Annual IEEE LEOS Conference, San Jose, CA, 15-18 Nov. 1993, pp. 71-72.
- C-13. L. J. Irakliotis, P. A. Mitkas, D. P. Maniatis, and A. P. Jayasumana, "A Fiber Optic Local Area Network Interface based on Soliton Dragging Gates," Proceedings of the Annual IEEE LEOS Conference, San Jose, CA, 15-18 Nov. 1993, pp. 392-393.
- C-14. D. P. Maniatis, P. A. Mitkas, L. J. Irakliotis, and A. P. Jayasumana, "Optoelectronic Implementation of the Register Insertion Bus High-Speed Network," Proceedings of the Annual IEEE LEOS Conference, San Jose, CA, 15-18 Nov. 1993, pp. 394-395.
- C-15. L. Irakliotis and P. A. Mitkas, "Tomographic Storage Scheme for 3D Implementation of Database Operations," presented at the 39th SPIE International Symposium on Optical Applied Science and Engineering, Conference on Very Large Optical Memories, San Diego, CA, July 1994. Paper appears in *Photonics for Processors, Neural Networks and Memories II*, J. L. Horner, B. Javidi, and S. T. Kowell (eds), Proceedings of the SPIE, Vol. 2297, pp. 359-367, 1994.
- C-16. F. R. Beyette, Jr., P. A. Mitkas, S. A. Feld, and C. W. Wilmsen, "Optoelectronic Bitwise Compare-and-Exchange Modules based on a Silicon / Vertical Cavity Laser Hybrid," IEEE/LEOS Summer Topical Meeting Digest on Smart Pixels, Lake Tahoe, NV, July 11-13, 1994, pp. 70-71.
- C-17. R. D. Snyder, F. R. Beyette, Jr., S. A. Feld, K. M. Geib, L. J. Irakliotis, P. A. Mitkas, and C. W. Wilmsen, "Phototransistor/Surface Emitting Laser Smart Pixel Array Implementation of an Optoelectronic Data Filter," IEEE/LEOS Summer Topical Meeting Digest on Smart Pixels, Lake Tahoe, NV, July 11-13, 1994, pp. 45-46.
- C-18. P. A. Mitkas, S. P. Sastry, and T. W. Plymell, "Text Search with an Acoustic Charge Transport Device," in Proceedings of the 37th Midwest Symposium on Circuits & Systems, Lafayette, LA, August 1-5, 1994, Vol. 1, pp. 125-128.
- C-19. F. R. Beyette, Jr., P. A. Mitkas, S. A. Feld, and C. W. Wilmsen, "Sorting with an Optoelectronic Recirculating Architecture," presented at the '94 Optical Computing Conference, Edinburgh, Scotland, UK, August 22-25, 1994.
- C-20. P. A. Mitkas and L. J. Irakliotis, "Optoelectronic Implementation of Tomographic Sorting," presented at the '94 Optical Computing Conference, Edinburgh, Scotland, UK, August 22-25, 1994.
- C-21. R. D. Snyder, F. R. Beyette, Jr., S. A. Feld, K. M. Geib, L. J. Irakliotis, P. A. Mitkas, and C. W. Wilmsen, "Phototransistor/Surface Emitting Laser Array Implementation of an Optoelectronic Data Filter," presented at the '94 Optical Computing Conference, Edinburgh, Scotland, UK, August 22-25, 1994.
- C-22. L. J. Irakliotis, P. A. Mitkas, S. A. Feld, F. R. Beyette, Jr., R. Snyder, and C. W. Wilmsen, "Applications of Vertical Cavity Surface Emitting Lasers on Parallel Optoelectronic Digital Data Processing," presented at the 10th National Conference on Lasers and Applications, Ioannina, Greece, September 21-23, 1994, (text in Greek).
- C-23. S. Al-Harhi and P. A. Mitkas, "Modelling the Storage Requirements of Multimedia Systems," in Proceedings of the 14th IASTED International Conference on Modelling, Identification and Control, Igls, Austria, February 20-22, 1995, pp. 42-44.
- C-24. R. D. Snyder, J. W. Lurkins, S. A. Feld, F. R. Beyette, Jr., L. J. Irakliotis, P. A. Mitkas, and C. W. Wilmsen, "Design and Demonstration of Projection and Selection Modules for a VCSEL/HPT based Database Filter," presented at the 1995 OSA Topical Meeting on Optical Computing, Salt Lake City, UT, March 1995.
- C-25. L. J. Irakliotis and P. A. Mitkas, "Optoelectronic Random Access Memory with Selective Row Decoder for Optical Information Processing," presented at the 38th Midwest Symposium on Circuits & Systems, Rio de Janeiro, Brazil, August 13-16, 1995.
- C-26. P. A. Mitkas, "Parallel Optoelectronic Storage for Image Databases," presented at the 1995 International Workshop on Stereoscopic and Three-dimensional Imaging (IWS3DI'95), Santorini, Greece, September 6-8, 1995.

Pericles A. Mitkas

- C-27. Snyder, R.D. Beyette, F.R., Jr. Stanko, P.J. Feld, S.A. Lurkins, J.W. Irakliotis, L.J. Mitkas, P.A. Wilmsen, C.W., "Optical power requirements for an optoelectronic database filter based on VCSEL/HPT smart pixel arrays," Proceedings of IEEE LEOS Annual Meeting, San Francisco, CA, USA, Oct. 30-31, 1995, Vol. 1, pp. 63-64.
- C-28. G. A. Betzos and P. A. Mitkas, "Optoelectronic Interconnects for Massively Parallel Numerical Processing," presented at the 1995 OSA Annual Meeting, Portland, OR, September 10-15, 1995.
- C-29. B. J. Goertzen and P. A. Mitkas, "Reliable Storage and Retrieval of Database Records using a Volume Holographic Medium," 1995 OSA Annual Meeting, Portland, OR, September 10-15, 1995.
- C-30. R. D. Snyder, F. R. Beyette, Jr., P. J. Stanko, S. A. Feld, J. W. Lurkins, L. J. Irakliotis, P. A. Mitkas, and C. W. Wilmsen, "Demonstration of an Optoelectronic Database Filter based on VCSEL/HPT Smart Pixel Arrays," presented at the IEEE/LEOS Annual Meeting, San Francisco, CA, October 1995.
- C-31. F. R. Beyette, Jr., P. A. Mitkas, and C. W. Wilmsen, "Design of an Optoelectronic Bitwise Compare-and-Exchange Module based on a CMOS/VCSEL Hybrid," presented at the IEEE/LEOS Annual Meeting, San Francisco, CA, October 1995.
- C-32. M. Schaffer and P. A. Mitkas, "Smart Photodetector Arrays in Silicon CMOS: Practical Considerations," in Proceedings of the Workshop on Data Encoding for Page-oriented Optical Memories (DEPOM'96), March 27-28, 1996, Phoenix, AZ, pp. 93-97.
- C-33. G. A. Betzos, P. A. Mitkas, J. F. Hutton, and M. Porter, "Evaluation of Array Codes for Large Data Pages," in Proceedings of the Workshop on Data Encoding for Page-oriented Optical Memories (DEPOM'96), March 27-28, 1996, Phoenix, AZ, pp. 63-66.
- C-34. B. J. Goertzen, K. G. Richling, and P. A. Mitkas, "Implementation of a Volume Holographic Database System," presented at the International Topical Meeting on Optical Computing, OC '96, April 21-25, 1996, Sendai, Japan.
- C-35. K. G. Richling and P. A. Mitkas, "Characterization of Volume Holographic Associative Searching," presented at the OSA Holography Topical Meeting, Boston, MA, April 28-30, 1996.
- C-36. M. Schaffer and P. A. Mitkas, "Design of Smart Photodetector Arrays for Page-oriented Optical Memories," Proceedings of the Second International Conference on Optical Information Processing, St. Petersburg, Russia, June 17-21, 1996, SPIE Vol. 2969, pp. 176-181.
- C-37. L. J. Irakliotis and P. A. Mitkas, "The Electronic Computer/Optical Memory Interface," presented at the 41st SPIE International Symposium on Optical Applied Science and Engineering, Conference on Materials, Devices, and Systems for Optoelectronic Processing, Denver, CO, August 5-9, 1996.
- C-38. J. Hutton, M. Schaffer, G. A. Betzos, and P. A. Mitkas, "Error Correcting Codes for Page-oriented Optical Memories," presented at the 41st SPIE International Symposium on Optical Applied Science and Engineering, Conference on Materials, Devices, and Systems for Optoelectronic Processing, Denver, CO, Vol. 2848, August 5-9, 1996.
- C-39. J. W. Lurkins, R. D. Snyder, P. J. Stanko, L. J. Irakliotis, P. A. Mitkas, and C. W. Wilmsen, "Design and Demonstration of an Optoelectronic Look-Up Table Using VCSEL-based Logic," presented at the 41st SPIE International Symposium on Optical Applied Science and Engineering, Conference on Materials, Devices, and Systems for Optoelectronic Processing, Denver, CO, August 5-9, 1996.
- C-40. P. J. Stanko, F. R. Beyette, Jr., E. M. Hayes, R. D. Snyder, S. A. Feld, P. A. Mitkas, and C. W. Wilmsen, "Performance of a Silicon CMOS/VCSEL Smart Pixel for a Recirculating Sorter," presented at IEEE/LEOS Summer Topical Meetings, Keystone, CO, August 5-9, 1996.
- C-41. L. J. Irakliotis, G. A. Betzos, and P. A. Mitkas, "Interfacing Optical Memories and Electronic Computers," in Proceedings of the Third International Conference on Electronics, Circuits, and Systems (ICECS'96), Rodos, Greece, October 13-16, 1996, Vol. 1, pp. 574-577.
- C-42. G. A. Betzos, J. F. Hutton, M. S. Porter, and P. A. Mitkas, "Evaluation of Array Codes for Page-Oriented Optical Memories," presented at the OSA Topical Meeting on Optics in Computing, Lake Tahoe, NV, March 18-21, 1997.
- C-43. A. Simone, P. A. Mitkas, and G. Betzos, "Data Recovery during Two-dimensional Read-out of Optical Tape," presented at the IEEE/LEOS Optical Data Storage Topical Meeting, Tucson, Arizona, April 7-9, 1997. Paper appears at SPIE Proceedings, Vol. 3109, pp. 116-125, 1997.

Pericles A. Mitkas

- C-44. F. R. Beyette, Jr., P. A. Mitkas, M. Schaffer, E. M. Hayes, R. Pu, R. Jurrat, and C. W. Wilmsen, "Development of a Database Filter based on Optoelectronic Smart Pixel Arrays," SPIE Proceedings, Vol. 3110, (I. Shladov and S. R. Rotman, Eds,) pp.838-848, September 1997.
- C-45. M. Schaffer and P. A. Mitkas, "Implementation of a Cluster Error Correction Code for Page-oriented Optical Memory with Use of a 0.35 mm CMOS-based Smart Photodetector Array," presented at the OSA Annual Meeting, Long Beach, CA, October 12-17, 1997.
- C-46. M. S. Porter and P. A. Mitkas, "Recording of Gray-scale Data in Holographic Memories," presented at the OSA Annual Meeting, Long Beach, CA, October 12-17, 1997.
- C-47. G. A. Betzos, J. F. Hutton, M. S. Porter, and P. A. Mitkas, "Error Correction for Page-oriented Memories," presented at the OSA Annual Meeting, Long Beach, CA, October 12-17, 1997.
- C-48. M. Schaffer and P. A. Mitkas, "Smart Photodetector Arrays for Error Control in Page-oriented Optical Memories," presented at the Image Sensors session of the 26th AIPR Workshop Exploiting New Image Sources and Sensors, Washington, DC, October 15-17, 1997. Paper appears at SPIE Proceedings, Vol. 3240, pp. 19-28, 1997.
- C-49. K. G. Richling, P. A. Mitkas, S. Mailis, L. Boutsikaris, and N. Vainos, "Holographic Storage and Associative Processing of Analog and Digital Data," Proceedings of the IEEE LEOS 10th Annual Meeting, San Francisco, CA, November 10-13, 1997, Vol. 1, pp. 132-133.
- C-50. P. A. Mitkas, G. Betzos, S. Mailis, and N. Vainos, "Characterization of Associative Recall in a Volume Holographic Database System for Multimedia Applications," presented at AeroSense '98, Advances in Optical Information Processing VIII, Orlando, FL, April 13-17, 1998. Paper appears at SPIE Proceedings, Vol. 3388, pp. 198-208, 1998.
- C-51. M. Schaffer and P. A. Mitkas, "Requirements and Design Constraints for CMOS Smart Photodetector Arrays," in Proceedings of the 1998 International Conference on Telecommunications (ICT'98), Porto Carras, Greece, June 22-25, 1998, Vol. III, pp. 245-249.
- C-52. T. N. Garrett and P. A. Mitkas, "Three-dimensional Error Correcting Codes for Volumetric Optical Memories," presented at the Conference on Advanced Optical Memories and Interfaces to Computer Storage, 43rd SPIE Intern. Symp. on Optical Science, Engineering and Instrumentation, San Diego, CA, July 19-24, 1998. Paper appears at SPIE Proceedings, Vol. 3468, pp. 116-124, 1998.
- C-53. L. J. Irakliotis and P. A. Mitkas, "Improved Memory Interfaces based on Multi-phase Clocks," presented at the Conference on Advanced Optical Memories and Interfaces to Computer Storage, 43rd SPIE Intern. Symp. on Optical Science, Engineering and Instrumentation, San Diego, CA, July 19-24, 1998. Paper appears at SPIE Proceedings, Vol. 3468, pp. 101-107, 1998.
- C-54. M. S. Porter and P. A. Mitkas, "Fast Method for Dynamic Thresholding in Volume Holographic Memories," presented at the Conference on Advanced Optical Memories and Interfaces to Computer Storage, 43rd SPIE Intern. Symposium on Optical Science, Engineering and Instrumentation, San Diego, CA, July 19-24, 1998. Paper appears at SPIE Proceedings, Vol. 3468, pp. 85-95, 1998.
- C-55. P. B. Berra, P. A. Mitkas, and R. A. Liuzzi, "Dynamic Data Mining Using an Electro-Optical Data Warehouse," in Proceedings of the 1998 IEEE Information Technology Conference, Syracuse, NY, September 1-3, 1998.
- C-56. G. Betzos, S. Zhong, and P. A. Mitkas, "Characterization of a Volume Holographic Memory using a Digital Micromirror Display," OSA Annual Meeting, Baltimore, MD, October 5-9, 1998.
- C-57. V. Tornari, E. Tzamali, D. Fantidou, N. A. Vainos, G. Betzos, and P. A. Mitkas, "Dynamic Holographic Image Amplification and Projection: The Key to Optical Interfacing," presented at OWLS-98, Heraklion, Greece, October 13-16, 1998.
- C-58. G. Betzos, P. A. Mitkas, and C. W. Wilmsen, "Design of An Optoelectronic Biomolecular Scanning System Using Smart VCSEL and Photodetector Arrays," presented at the OSA Topical Meeting on Optics in Computing, Snowmass, CO, April 12-16, 1999.
- C-59. T. Garrett and P. A. Mitkas, "Equal and Unequal Error Protection Codes for Volume Holographic Storage Systems," presented at the Conference on Advanced Optical Data Storage: Materials, Systems and Interfaces to Computers,, 44th SPIE Intern. Symp. on Optical Science, Engineering and Instrumentation, Denver, CO, July 19-23, 1999. Paper appears at SPIE Proceedings, Vol. 3802, pp. 30-39, 1999.

- C-60. S. Zhong, G. Betzos, and P. A. Mitkas, "Evaluation of Associative Recall in Holographic Memories," presented at the Conference on Advanced Optical Data Storage: Materials, Systems and Interfaces to Computers, 44th SPIE Intern. Symp. on Optical Science, Engineering and Instrumentation, Denver, CO, July 19-23, 1999. Paper appears at SPIE Proceedings, Vol. 3802, pp. 85-95, 1999.
- C-61. Z. Abas, G. Banos, P. A. Mitkas, P. Saragiotis, and I. Maltaris, "AMNOS: An Integrated Web-Based Platform for Dairy Sheep Breeding Management," 7<sup>th</sup> World Congress on Genetics Applied to Livestock Production, Montpellier, France, August 19-23, 2002.
- C-62. P. A. Mitkas, A. Symeonidis, D. Kechagias, I. Athanasiadis, G. Laleci, G. Kurt, Y. Kabak, A. Acar, and A. Dogac, "An Agent Framework for Dynamic Agent Retraining: Agent Academy," eBusiness and eWork 2002 (e2002) 12th annual conference and exhibition, 16-18 October, 2002, Prague, Czech Republic. Published in B. Stanford-Smith, E. Chiozza, and M. Edin (eds.), Challenges and Achievements in e-business and e-work, IOS Press, 2002, pp.757-764.
- C-63. P. A. Mitkas, "Agent Academy: a data mining framework for training intelligent agents," European Projects Presentation Day of the 13th Eur. Conf. on Machine Learning & 6th Eur. Conf. on Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD 2002), Helsinki, Finland, 2002.
- C-64. P. A. Mitkas, D. Kehagias, A. L. Symeonidis, and I. N. Athanasiadis, "Agent Academy: An integrated tool for developing multi-agent systems and embedding decision structures into agents," in the First European Workshop on Multi-Agent Systems (EUMAS 2003), Dec. 18-19, 2003, Oxford, UK.
- C-65. S. Diplaris, A. L. Symeonidis, P. A. Mitkas, G. Banos, and Z. Abas, "An Alarm Firing System for National Genetic Evaluation Quality Control," in the 2004 Proceedings of the Interbull Annual Meeting, May 30 - June 2, 2004, Tunis, Tunisia, Vol. 32, pp. 146-150.
- C-66. I. N. Athanasiadis and P. A. Mitkas, "Software Agents for Assessing Environmental Quality: Advantages and Limitations," In 18th International Conference Informatics for Environmental Protection: Sh@ring (EnvirolInfo 2004), Geneva, Switzerland, GI, October 2004, Vol. 2, pp. 303-306.
- C-67. I. N. Athanasiadis, A. K. Mentis, P. A. Mitkas, and Y. A. Mylopoulos, "A system for evaluating water pricing alternatives in urban areas," HELECO '05, Water Management Section: New Legislative Framework for the Integrated Water Resources Management Track, Athens Greece, Technical Chamber of Greece, February 3-6, 2005.
- C-68. I. N. Athanasiadis and P. A. Mitkas, "A distributed system for managing and diffusing environmental information," 5th International Exhibition and Conference on Environmental Technology (HELECO '05), Environment and Development (HELECO '05), Environment: Methodological and Managerial Tools Section: Methods and Techniques for environmental monitoring Track, Athens Greece, Technical Chamber of Greece, February 3-6, 2005.
- C-69. A. L. Symeonidis, K. C. Chatzidimitriou, D. Kehagias, and P. A. Mitkas, "An Intelligent Recommendation Framework for ERP Systems," IASTED International Conference on Artificial Intelligence and Applications (AIA 2005), February 14 - 16, 2005, Innsbruck, Austria.
- C-70. I. Athanasiadis, K. Karatzas, and P. Mitkas, "Contemporary air quality forecasting methods: A comparative analysis between statistical methods and classification algorithms," 5th Int'l Conference on Urban Air Quality, Valencia, March 2005.
- C-71. I. N. Athanasiadis, M. Milis, P. A. Mitkas, and S. Michaelides. "ABACUS: A multi-agent system for meteorological radar data management and decision support," Int'l Symposium on Environmental Software Systems (ISESS-05), Sesimbra, Portugal, May 24-27, 2005.
- C-72. H. Eleftherohorinou, S. Diplaris, P. A. Mitkas, and G. Banos, "AGELI: An integrated platform for the assessment of national genetic evaluations by learning and informing," Interbull Annual Meeting, Uppsala, Sweden, June 2-3, 2005.
- C-73. A. L. Symeonidis and P. A. Mitkas, "A methodology for predicting agent behavior by the use of data mining techniques," presented at the International Workshop on Autonomous Intelligent Systems: Agents and Data Mining (AIS-ADM 2005), St. Petersburg, Russia, June 6-8, 2005.
- C-74. Ch. Collyda, S. Diplaris, A. Delopoulos, N. Maglaveras, P.A. Mitkas and C. Pappas, "Towards building a model for the unification of distributed and heterogeneous biomedical repositories," 10th International Symposium for Health Information Management Research, Thessaloniki, Greece, September 2005.



- C-75. I. N. Athanasiadis, A. Solsbach, P. A. Mitkas, and J. Marx-Gomez, "An agent-based middleware for environmental information management," Second Symposium on Information Technologies in Environmental Engineering (ITEE 2005), Magdeburg, Germany, ICSC-NAISO Academic Press, Sept. 2005.
- C-76. F. E. Psomopoulos and P. A. Mitkas, "A protein classification engine based on stochastic finite state automata," Lecture Series on Computer and Computational Sciences VSP/Brill, 4B (2005), 1371-1374, Proc. of the Symp. 35: Computational Methods in Molecular Biology at the ICCMSE 2005, Loutraki, Greece, 21-26 October, 2005.
- C-77. D. G. Eliades, A. L. Symeonidis and P. A. Mitkas, "GeneCity: A multi-agent simulation environment for hereditary diseases," Third European Workshop on Multi-Agent Systems (EUMAS-2005), Brussels, Belgium, Dec. 7-8, 2005, pp. 137-147.
- C-78. Z. Abas, A. L. Symeonidis, A. Batzios, Z. Basdagianni, G. Banos, P. A. Mitkas, E. Sinapis, and A. Pampoukidou, "AMNOS-mobile®: Exploiting handheld computers in efficient sheep recording," 35<sup>th</sup> ICAR, Kuopio, Finland, June 7-10, 2006.
- C-79. M. Efrimidou, M. Kanaki, I. Athanasiadis, P. A. Mitkas, and K. Karatzas, "Data mining air quality data for Athens, Greece," Proceedings of the 20th International Conference on Informatics for Environmental Protection "Managing Environmental Knowledge" (Klaus Tochtermann and Arno Scharl., eds), EnviroInfo2006, Graz, Austria, Sept. 6-8, 2006, pp. 505- 508.
- C-80. F. E. Psomopoulos and P. A. Mitkas, "PROTEAS: A Finite State Automata based data mining algorithm for rule extraction in protein classification," in Proc. of the 5th Hellenic Data Management Symposium (HDMS 2006), Thessaloniki, Greece, Sept. 7-8, 2006, pp. 118-126.
- C-81. F. E. Psomopoulos, H. E. Polychroniadou, and P. A. Mitkas, "G-Class: A Divide and Conquer Application for Grid Protein Classification," in Proc. of the 2nd ADMKD 2006: Workshop on Data Mining and Knowledge Discovery (in conjunction with ADBIS'2006: The 10th East-European Conference on Advances in Databases and Information Systems), Thessaloniki, Greece, Sept. 3-7, 2006, pp. 121-132.
- C-82. F. Tzima, I. N. Athanasiadis, and P. A. Mitkas, "Agent-based modelling and simulation in the irrigation management sector: Applications and potential," International Conference on Water Saving in Mediterranean Agriculture & Future Research Needs, (WASAMED 2007), Bari, Italy, Feb. 14-17, 2007.
- C-83. C. Dimou, A.L. Symeonidis, and P.A. Mitkas, "Evaluating Knowledge Intensive Multi-Agent Systems", Proc. of the International Workshop on Autonomous Intelligent Systems: Agents and Data Mining, St. Petersburg, Russia, June 3-5, 2007, pp.74-87.
- C-84. A. M. Kaufmann, A. Schneider, T. Agorastos, N. Maglaveras, A. Symeonidis, and P. A. Mitkas, "Association studies in cervical cancer assisted by inference and semantic technologies," Proc. of 24<sup>th</sup> International Papillomavirus Conference, Beijing, China, Nov. 3-9, 2007.
- C-85. D. D. Kehagias and P. A. Mitkas, "Efficient E-Commerce Agent Design Based on Clustering eBay Data", Agent and Data Mining Interaction (ADMI2007) Workshop in conjunction with the 2007 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT-2007), Silicon Valley, California, Nov. 1-4, 2007, pp. 495-498.
- C-86. Ch. Collyda, S. Diplaris, P. A. Mitkas, N. Maglaveras, and C. Pappas, "Profile Fuzzy Hidden Markov Models for Phylogenetic Analysis and Protein Classification", 5<sup>th</sup> Annual Rocky Mountain Bioinformatics Conference, Aspen/Snowmass, CO, USA, Nov. 30 – Dec. 2, 2007.
- C-87. C. Gkekas, F. E. Psomopoulos, and P. A. Mitkas, "A parallel data mining application for Gene Ontology term prediction," 3rd EGEE User Forum, Clermont-Ferrand, France, Feb. 11-14, 2008.
- C-88. F. E. Psomopoulos and P. A. Mitkas, "Sizing up: Bioinformatics in a grid context", 3<sup>rd</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics - HSCBB '08, Thessaloniki, Greece, Oct. 2008.
- C-89. F. E. Psomopoulos and P. A. Mitkas, "BADGE: Bioinformatics Algorithm Development for Grid Environments," in Local Proceedings of the PCI 2009 Conference, Corfu, Greece, Sept. 10-12, 2009, pp. 7-21.
- C-90. F. E. Psomopoulos and P. A. Mitkas, "Clustering phylogenetic profiles", 4<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics - HSCBB '09, Athens, Greece, Dec. 2009.
- C-91. F. Tzima, F. E. Psomopoulos and P. A. Mitkas, "An investigation of the effect of clustering-based initialization on Learning Classifier Systems' effectiveness: Leveraging the Grid infrastructure," 5th EGEE User Forum, Uppsala, Sweden, April 12-16, 2010, oral presentation.

## Pericles A. Mitkas

- C-92. K. Chatzidimitriou, F. E. Psomopoulos and P. A. Mitkas, "Grid-enabled parameter initialization for high performance machine learning tasks," 5th EGEE User Forum, Uppsala, Sweden, April 12-16, 2010, oral presentation.
- C-93. F. E. Psomopoulos, P. A. Mitkas, and C. A. Ouzounis, "Clustering of discrete and fuzzy phylogenetic profiles," 5th Conference of the Hellenic Society For Computational Biology and Bioinformatics – HSCBB '10, 19-21 Oct. 2010, Alexandroupoli, Greece, pp. 58.
- C-94. D. Vitsios, F. E. Psomopoulos, P. A. Mitkas, and C. A. Ouzounis, "Detecting species evolution through metabolic pathways," 6<sup>th</sup> Conference of the Hellenic Society for Computational Biology & Bioinformatics – HSCBB '11, 7-9 Oct. 2011, Patra, Greece, pp. 16.
- C-95. K. N. Vavliakis, F. A. Tzima, and P. A. Mitkas, "Event Detection via LDA for the MediaEval2012 SED Task," in Working Notes Proceedings of the MediaEval 2012 Workshop, 4-5 Oct. 2012, Santa Croce in Fos-sabanda, Pisa, Italy.
- C-96. K. N. Vavliakis, G. T. Karagiannis, and P.A. Mitkas, "Semantic Web in Cultural Heritage After 2020," in Proc. of What will the Semantic Web look like 10 years from now? Workshop held in conjunction with the 11th International Semantic Web Conference 2012 (ISWC 2012), Nov. 7-11, 2012, Boston, USA.

## **Presentations in National Conferences**

- NC-1. C. Gkekas, F. E. Psomopoulos, and P. A. Mitkas, "Modeling Gene Ontology terms using Finite State Automata", Hellenic Bioinformatics & Medical Informatics Meeting, Bioacademy, Athens, Greece, Oct. 4-5, 2007.
- NC-2. I. Mprouza, F. E. Psomopoulos, and P. A. Mitkas, "Simulating molecular dynamics through intelligent software agents", Hellenic Bioinformatics & Medical Informatics Meeting, Bioacademy, Athens, Greece, Oct. 4-5, 2007.
- NC-3. S. Diplaris, G. Papachristoudis, and P. A. Mitkas, "SoFoCles: Feature Filtering for Microarray Classification based on Gene Ontology", Hellenic Bioinformatics & Medical Informatics Meeting, Bioacademy, Athens, Greece, Oct. 4-5, 2007.
- NC-4. F. E. Psomopoulos, P. A. Mitkas, C. S. Krinas, and I. N. Demetropoulos, "G-MolKnot: A grid enabled systematic algorithm to produce open molecular knots," 1<sup>st</sup> HellasGrid User Forum, Athens, Greece, Jan. 10-11, 2008.

## **Technical Reports**

- TR-1. P. B. Berra and P. A. Mitkas, An Initial Design for a Very Large Knowledge Base Architecture, Technical Report TR-8735, Northeast Artificial Intelligence Consortium, Syracuse University, 1988.
- TR-2. P. B. Berra, A. Ghafoor, S. M. Chung, N. Hachem, S. J. Marcinkowski, P. A. Mitkas, and D. Shin, Computer Architecture for Very Large Knowledge Bases, Technical Report RADC-TR-90-404, Vol. XI (of 18), Northeast Artificial Intelligence Consortium, RADC, Griffiss Air Force Base, NY 13441-5700, December 1990.
- TR-3. P. A. Mitkas, Error Detection and Correction for Optical Memories, Technical Report RL-TR-97-13, Rome Laboratory, AF Materiel Command, Rome, NY, June 1997.
- TR-4. P. B. Berra, P. A. Mitkas, and L. M. Duvall, Dynamic Data Mining using an Electro-optical Data Warehouse, Technical Report, AFRL-IF-RS-TR-1999-63, AFRL Information Directorate, Rome Research Site, Rome, NY, April 1999.