

# PCI 2009 PROGRAMME

## DAY 1 - Thursday September 10, 2009

16:00 - 17:00 Registration

Welcome (Lecture Room - 1)

- 17:00 - 17:15
- **PCI 2009 General Chairs:**  
Vassilios Chrissikopoulos (Ionian University) and Nikolaos Alexandris (University of Piraeus)
  - **President of the Greek Computer Society:**  
Nestor Ioannidis
  - **PCI 2009 PC Chairs:**  
Christos Douligeris (University of Piraeus), Nikolaos Kanellopoulos (Ionian University).

17:15 - 17:45

**Keynote I: "Emerging computational challenges in pervasive assistive environments"**  
**Professor Fillia Makedon**, Professor and Department Head of Computer Science and Engineering at the University of Texas at Arlington (UTA)  
**Chair:** Christos Douligeris  
**Location:** Lecture Room - 1

17:45 - 18:30 Coffee/Refreshments

### ~ Parallel Sessions 1 & 2 ~

18:30 - 20:30

**Session 1:** Algorithms and Theoretical Foundations I

**Location:** Lecture Room - 1

**Chair:** Panayiotis Vlamos

**Session 2:** Networking Data Management, AI and Data Mining I

**Location:** Lecture Room - 2

**Chair:** Spyros Sioutas

18:30 - 18:50

- **Fotis E. Psomopoulos and Pericles A. Mitkas** *Bioinformatics Algorithm Development for Grid Environments*

- **Alexis Papadimitriou, Dimitrios Katsaros and Yannis Manolopoulos** *Query Sensitive Storage for Wireless Sensor Networks*

18:50 - 19:10

- **Paparrizos K. Ioannis** *Homogeneous and Non Homogeneous Algorithms*

- **Ioannis Patiniotakis, Dimitris Apostolou and Gregoris Mentzas** *Applying a Linguistic Operator for Aggregating Movie Preferences*

19:10 - 19:30

- **Radu Nicolae Cristea** *Dynamic Decision Systems—A Fuzzy-Duopoly Approach*

- **Kostas Anagnostou and Manolis Maragoudakis** *Data Mining for Player Modeling in Videogames*

19:30 - 19:50

- **A. Samaras, G. Pangalos, C. Ilioudis, and I. Pagkalos** *Using Nature and Bio-inspired Technologies for Building Innovative Proactive Security Mechanisms*

- **Petros Lalos, Christos K. Datsikas and George S. Tombras** *A Framework for Community "Share Taxi" with the use of Hybrid Positioning Systems*

19:50 - 20:10	<ul style="list-style-type: none"> <li>▪ <b>Charalampos S. Kouzinopoulos and Konstantinos G. Margaritis</b> <i>String Matching on a Multicore GPU Using CUDA</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Prodromos Chatziagorakis, Georgios Ch. Sirakoulis and John Lygouras</b> <i>Automatic Generation of Cellular Neural Networks for Distributed Sensor Data Processing</i></li> </ul>
20:10 - 20:30	<ul style="list-style-type: none"> <li>▪ <b>Theodore Andronikos, Michalis Stefanidakis, and Ioannis Papadakis</b> <i>Adding Temporal Dimension to Ontologies via OWL Reification</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Stylianos Drakatos, Christos Douligeris</b> <i>Context Awareness and Prediction for Mobile and Ubiquitous Computing</i></li> </ul>
20:45	<b>Welcome Reception: Snack and Wine, Concert</b> <b>Location: Ionian Academy</b>	

## DAY 2 - Friday September 11, 2009

### ~ Session 3 ~

Session 3: Web Engineering	
09:30 - 11:10	<b>Location:</b> Lecture Room - 1 <b>Chair:</b> Michalis Stefanidakis
09:30 - 09:50	<ul style="list-style-type: none"> <li>▪ <b>Dimitris Panagiotou and Gregoris Mentzas</b> <i>A Semantic Wiki for Software Development</i></li> </ul>
09:50 - 10:10	<ul style="list-style-type: none"> <li>▪ <b>Sotirios Kontogiannis, Stavros Valsamidis, Pavlos Efraimidis and Alexandros Karakos</b> <i>Probing based load balancing for web server farms</i></li> </ul>
10:10 - 10:30	<ul style="list-style-type: none"> <li>▪ <b>Ioannis Karydis and Vasileios Laopodis</b> <i>Web 2.0 Cultural Networking</i></li> </ul>
10:30 - 10:50	<ul style="list-style-type: none"> <li>▪ <b>Evangelos V. Moutselakis and Alexandros S. Karakos</b> <i>Semantic Web Multimedia Metadata Retrieval: A Music Approach</i></li> </ul>
10:50 - 11:10	<ul style="list-style-type: none"> <li>▪ <b>Lampros C. Stavrogiannis and Pericles A. Mitkas</b> <i>Software Agents in Multiple Adaptive Double Auction Markets</i></li> </ul>
11:10 - 12:00	Coffee/Refreshments
12:00 - 12:30	<b>Keynote II: "As the Web evolves"</b> <b>Professor George Mytakides</b> , University of Patras <b>Chair:</b> Christos Douligeris <b>Location :</b> Lecture Room - 1

~ *Parallel Sessions 4 & 5* ~

	<p><b>Session 4:</b> Algorithms and Theoretical Foundations II</p> <p><b>Location:</b> Lecture Room - 1</p> <p><b>Chair:</b> Theodore Andronikos</p>	<p><b>Session 5:</b> Networking Data Management, AI and Data Mining II</p> <p><b>Location:</b> Lecture Room - 2</p> <p><b>Chair:</b> Konstantinos Oikonomou</p>
12:30 - 14:30		
12:30 - 12:50	<ul style="list-style-type: none"> <li>▪ <b>Nestor Ioannidis and Ioannis Voyiatzis</b> <i>Embedding Test Patterns in Accumulator-Generated Sequences in <math>O(1)</math> Time</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>I.E. Livieris, M.S. Apostolopoulou, D.G. Sotiropoulos, S. Sioutas, and P. Pintelas</b> <i>Classification of Large Biomedical Data Using ANNs Based on BFGS Method</i></li> </ul>
12:50 - 13:10	<ul style="list-style-type: none"> <li>▪ <b>Michael Resvanis and Ioannis Chatzigiannakis</b> <i>Experimental Evaluation of Duplicate Insensitive Counting Algorithms</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Panagiotis Gouvas and Gregoris Mentzas</b> <i>BlueMesh – A protocol that facilitates P2P application development in Bluetooth-based Personal Area Networks</i></li> </ul>
13:10 - 13:30	<ul style="list-style-type: none"> <li>▪ <b>I.E. Livieris, D.G. Sotiropoulos, and P. Pintelas</b> <i>On Descent Spectral CG algorithm for Training Recurrent Neural Networks</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>M. Panagopoulos, P. Rousopoulos, D. Arabadjis, and C. Papaodysseus</b> <i>Information System for Graphological Identification</i></li> </ul>
13:30 - 13:50	<ul style="list-style-type: none"> <li>▪ <b>Eleni Fragkiadaki, Georgios Evangelidis, Nikolaos Samaras and Dimitris A. Dervos</b> <i>Cascading Citations Indexing Framework Algorithm Implementation and Testing</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Dimitrios Tsolis, Eleftherios Georgatos, and Spyros Sioutas</b> <i>The Use of Peer-to-Peer Networks in Copyright Protection</i></li> </ul>
13:50 - 14:10	<ul style="list-style-type: none"> <li>▪ <b>Elias Hadjikyriacou, Nikolaos Samaras and Konstantinos Margaritis</b> <i>An Experimental Evaluation of a Parallel Genetic Algorithm Using MPI</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Theodoros Iliou and Christos-Nikolaos Anagnostopoulos</b> <i>Comparison of Different Classifiers for Emotion Recognition</i></li> </ul>
14:10 - 14:30	<ul style="list-style-type: none"> <li>▪ <b>Markos I. Avlonitis, Adamantia G. Pateli and Ioannis A. Morfis</b> <i>A Stochastic Model Using Self-Organization to Explore the ICT Industry Evolution</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Ilias Kotinas, Dimitrios P. Lyras, Kyriakos Sgarbas and Nikos Fakotakis</b> <i>A Tree-Based Approach for the Complementation of Logical Expressions</i></li> </ul>
14:30 - 16:00	Lunch break	

## ~ Session 6 ~

**Session 6:** Languages, Text and Speech Processing

16:00 - 17:00

**Location:** Lecture Room - 1

**Chair:** Katia Kermanidis

16:00 - 16:20

- **Vassilios Karakoidas and Diomidis Spinellis** *J%: Integrating Domain-Specific Languages with Java*

16:20 - 16:40

- **Iosif Mporas, Todor Ganchev, Theodoros Kostoulas, Katia Kermanidis and Nikos Fakotakis** *Automatic Speech Recognition System for Home Appliances Control*

16:40 - 17:00

- **Iosif Mporas, Alexandros Lazaridis, Todor Ganchev, and Nikos Fakotakis** *Using Hybrid HMM-Based Speech Segmentation to Improve Synthetic Speech Quality*

17:00 - 17:30

**Coffee/Refreshments**

## ~ Session 7 ~

**Session 7:** E-business, E-Health, E-Government

17:30 - 19:30

**Location:** Lecture Room - 1

**Chair:** Adamantia G. Pateli

17:30 - 17:50

- **Dimitrios Alexandrou, Fotis Xenikoudakis, and Gregoris Mentzas** *SEMPATH: Adapting Clinical Pathways by Utilizing Semantic Technologies*

17:50 - 18:10

- **Athanasios G. Ouzounis, Ioannis D. Zaharakis, and Achilles D. Kameas** *An Implementation of a Symbiotic Ecology with Self\* Properties in an eHealth Scenario*

18:10 - 18:30

- **Babis Magoutas and Gregoris Mentzas** *Adaptive Evaluation of Portal Quality: An eGovernment Case*

18:30 - 18:50

- **Vasileios Vlachos and Vassilios Karakoidas** *Chaperone: a content filtering web proxy based on public health policies*

18:50 - 19:10

- **Panos Fitsilis, Leonidas Anthopoulos, and Vassilis Gerogiannis** *Assessment frameworks of e-government projects: a comparison*

19:10 - 19:30

- **Th. Katsanevas** *A modern computerized test for career choices for economists*

20:30 - 23:00

**Gala Dinner ( Taverna Trypas )**

## DAY 3 - Saturday September 12, 2009

### Keynote III: "The Greek Information Society in Perspective"

09:30 - 10:00

**Professor Vassilis Assimakopoulos**, Special Secretariat for Digital Planning

**Chair:** Markos Avlonitis

**Location :** Lecture Room - 1

### ~ Parallel Sessions 8 & 9 ~

**Session 8:** Computer Networks

**Session 9:** Computer Security and Privacy

10:00 - 12:00

**Location:** Lecture Room - 1

**Location:** Lecture Room - 2

**Chair:** Konstantinos Chorianopoulos

**Chair:** Emmanouil Magkos

10:00 - 10:20

- **Leandros A. Maglaras and Dimitrios Katsaros** *New Metrics for Characterizing the Significance of Nodes in Wireless Networks via Path-Based Neighborhood Analysis*

- **Dimitris Mitropoulos and Diomidis Spinellis** *Securing e-voting against MITM attacks*

10:20 - 10:40

- **Nikos Giannopoulos, Christos Goumopoulos, and Achilles Kameas** *Design Guidelines for Building a Wireless Sensor Network for Environmental Monitoring*

- **Fotios Gogoulos, Anna Antonakopoulou, Aziz S. Mousas, Georgios V. Lioudakis, Dimitra I. Kaklamani, and Iakovos S. Venieris** *Privacy-Aware Passive Network Monitoring*

10:40 - 11:00

- **Dimitrios Makris, Georgios Xenakis, Giannis Gonianakis, and Alexandros Kaloxylos** *Implementation of a SIP Extension to Enable a More Efficient Communication Control*

- **Markos Avlonitis, Emmanouil Magkos, Michalis Stefanidakis, and Vassilis Chrissikopoulos** *A Novel Stochastic Approach for Modeling Random Scanning Worms*

11:00 - 11:20

- **Fotis T. Foukalas and George T. Karetsos** *A Study on the Performance of Adaptive Modulation and Cross-Layer Design in Cognitive Radio for Fading Channels*

- **Antonios Gouglidis and Ioannis Mavridis** *A Foundation for Defining Security Requirements in Grid Computing*

11:20 - 11:40

- **Konstantinos Oikonomou, Dimitrios Kogias, Leonidas Tzevelekas, and Ioannis Stavrakakis** *Investigation of Information Dissemination Design Criteria in Large-Scale Network Environments*

- **Christos Kalloniatis, Evangelia Kavakli, and Stefanos Gritzalis** *Methods for Designing Privacy Aware Information Systems: A Review*

11:40 - 12:00

- **Constantinos Patsakis and Nikolaos Alexandris** *Security implications of flawed shutdown policies*

12:00 - 12:30 Coffee/Refreshments

## ~ Session 10 ~

**Session 10:** Human Computer Interaction and Educational Software, Virtual Reality & Visualization I

**12:30 - 14:30** **Location:** Lecture Room - 1

**Chair:** Katia Kermanidis

**12:30 - 12:50** ▪ **Dimitrios Christopoulos and Athanasios Gaitatzes** *Multimodal Interfaces for Educational Virtual Environments*

**12:50 - 13:10** ▪ **Spyridon Papaloukas, Kiriakos Patriarcheas, and Michalis Xenos** *Usability Assessment Heuristics in New Genre Videogames*

**13:10 - 13:30** ▪ **Nektarios N. Kostaras and Michalis N. Xenos** *Assessing the Usability of Augmented Reality Systems*

**13:30 - 13:50** ▪ **Maria Keskenidou, LEMONIA Koskinidou and Apostolos Ampatzoglou** *A Controlled Experiment on Children Learning Experience Through Computer Games*

**13:50 - 14:10** ▪ **Domna Banakou, Konstantinos Chorianopoulos, and Kostas Anagnostou** *Avatars' Appearance and Social Behavior in Online Virtual Worlds*

**14:10 - 14:30** ▪ **Charalambos Koutsourelakis and Konstantinos Chorianopoulos** *Comparative Usability and Semantic Legibility of Icons in Mobile Phones*

**14:30 - 16:00** **Lunch break**

## ~ Session 11 ~

**Session 11:** Human Computer Interaction and Educational Software - Virtual Reality & Visualization II

**16:00 - 17:00** **Location:** Lecture Room - 1

**Chair:** Spyros Sioutas

**16:00 - 16:20** ▪ **Konstantinos Christidis, Niki Papailiou, Gregoris Mentzas, and Dimitris Apostolou,** *Exploring Gadget-based Interfaces for the Social Semantic Desktop*

**16:20 - 16:40** ▪ **Vlachos Panagiotis and Ioannis Karafyllidis,** *Quantum Game Simulator, Using the Circuit Model of Quantum*

**16:40 - 17:00** ▪ **Christos Katsanos, Athanasios Tsakoumis, and Nikolaos Avouris** *Web Accessibility: Design of an Educational System to Support Guidelines Learning*

Closing

**17:00** **Location:** Lecture Room - 1

▪ Vassilios Chrissikopoulos

▪ Nikolaos Alexandris

▪ Nestor Ioannidis: PCI 2010 Announcement