

Panayotis Antoniadis

Current position: Senior Researcher (ETH Zurich)

Date of Birth: 20/3/1976

Nationality: Hellenic (Greek)

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Research interests

Network economics, incentive mechanisms for peer-to-peer systems, game theory, federation policies, social software, online social networks, hybrid communities, urban planning, participative democracy, wireless mesh networks, high speed scheduling.

Education

- Sep 06 – Jun 08** UPMC Sorbonne Universités & Centre National de la Recherche Scientifique (CNRS), Paris, France
Post-doctoral fellow
Research topics: **Federation economics and hybrid communities**
Supervisor: Prof. Serge Fdida
- Jan 00 – Apr 06** Athens University of Economics and Business, Athens, Greece
PhD in Computer Science
Dissertation: **Economic Modeling and Incentive Mechanisms for Efficient Resource Provision in Peer-to-Peer Systems**
Supervisor: Prof. Costas Courcoubetis
Grade: Excellent
- Sep 97 – Sep 99** University of Crete, Computer Science Department, Heraklion, Greece
M.Sc. in Computer Science
Dissertation: **Architecture and Design of Charging Systems for Multiservice Networks**
- Sep 93 – Sep 97** University of Crete, Computer Science Department, Heraklion, Greece
B.Sc. in Computer Science
GPA: 7.85 [scale: 10max – 5min]
Diploma Thesis: **Implementation and evaluation of a CORBA manager for charging ATM Networks**
Award: First “Ericsson Award of Excellence in Telecommunications”

Research experience

- Oct 12 – now** Senior Researcher at ETH Zurich, Switzerland
- IST project EINS, the Network of Excellence in Internet Science – 7th FWP, No 288021
- Sep 06 – Sep 12** Researcher at UPMC Sorbonne Universités, Paris, France
- IST project OpenLab (OpenLab: extending FIRE testbeds and tools) – 7th FWP, No 287581
 - IST project NOVI (Networking innovations Over Virtualized Infrastructures) – 7th FWP, No 257867
 - ANR project Flab (Federating computing resources) – ANR-2010-VERS-002
 - ANR project CROWD (Consumer Generated Mobile Wireless Media) – ANR-08-VERS-006
 - IST project OneLab2: an open federated laboratory supporting network research for the Future Internet – 7th FWP, No 224263
 - RNRT project Ainet (Mobilité et Interopérabilité dans une Infrastructure Sans Fil) – No 01205
 - IST project WIP (An All-Wireless Mobile Network Architecture) – 6th FWP, No 27402
 - IST project OneLab: An open networking laboratory supporting communication network research across heterogeneous environments – 6th FWP, No 034819

- Jan 00 – Apr 06** **Athens University of Economics and Business, Athens, Greece**
- IST project MMAPPS (Market Management of Peer-to-Peer Services) – RTD No IST-2001-34201
 - IST project M3I (Market Management of Multiservice Internet) – RTD No IST-2009-11429
- Sep 97 – Sep 99** **Computer Science Department, University of Crete, Heraklion, Greece**
- European project ACTS-CASHMAN – AC039

Research visits

- Feb 15 – Mar 15** **Berlin University of the Arts, Germany, Project MAZI**
- Feb 14 – Mar 14** **London School of Economics, London, UK, Project COMPARE: Interdisciplinary explorations of self-organization in practice**
- May 13 – Jun 13** **Cambridge University, Cambridge, UK, Project PAWS: Public Access WiFi Service**
- Oct 10 – Dec 10** **Princeton University, Princeton, USA, GENI project Understanding Federation – NSF funding, No 1756**
- Mar 08 – Apr 08** **University of Southern California, Los Angeles, USA, NetHood project (<http://nethood.org>)**

Selected Publications (Complete list available at <http://www-rp.lip6.fr/~antoniad/publications.html>)

- [1] *Collective awareness as a public good: bottom-up experimentation with the NetHood toolkit, First Monday, special issue on Internet Science, to appear. (with I. Apostol)*
- [2] *The Right(s) to the Hybrid City and the Role of DIY Networking. The Journal of Community Informatics, vol. 10, nov. 2014 (with I. Apostol)*
- [3] *Flânerie between Net and Place: Possibilities for Participation in Planning. Journal of Planning Education and Research (JPER), 2013, 33(1): 20-33. (with I. Apostol and T. Banerjee)*
- [4] *Cyberspace Design: A New Challenge for Planners. ICE Journal of Urban Design and Planning, in print. (with I. Apostol and T. Banerjee)*
- [5] *Federation of virtualized infrastructures: sharing the value of diversity. In Proceedings of ACM CoNEXT 2010, Philadelphia, December 2010. (with S. Fdida, T. Friedman, and V. Misra)*
- [6] *Incentives for resource sharing in ad hoc networks: going beyond rationality. In Boon-Chong Seet (ed.), Mobile Peer-to-Peer Computing for Next Generation Distributed Environments: Advancing Conceptual and Algorithmic Applications. IGI Global Publishing, May 2009.*
- [7] *Community building over Neighborhood Wireless Mesh Networks. IEEE Society and Technology, Special issue on Potentials and Limits of Cooperation in Wireless Communications, 27(1):48-56, March 2008 (with B. Le Grand, A. Satsiou, L. Tassioulas, R. Aguiar, J.P. Barraca, and S. Sargento).*
- [8] *Enforcing efficient resource provising in peer-to-peer file sharing systems. ACM SIGOPS Operating Systems Review, 40(3): 67-72, July 2006. (with C. Courcoubetis).*
- [9] *Incentives for Content Availability in Memory-less Peer-to-Peer File Sharing Systems. ACM SIGecom Exchanges, 5(4): 11-20, July 2005. (with C. Courcoubetis and B. Strulo).*
- [10] *Comparing Economic Incentives in Peer-to-Peer Networks. Computer Networks, Special Issue on Network Economics, Elsevier, 45(1):133-146, September 2004. (with C. Courcoubetis and R. Mason).*
- [11] *FIRM: A Class of Distributed Scheduling Algorithms for High-speed ATM Switches with Multiple Input Queues. In Proceedings of IEEE INFOCOM 2000, March 2000. (with D. N. Serpanos).*

Total publications: 36

(1 book chapter, 11 journals, 20 refereed international conferences and workshops with proceedings, 4 refereed international workshops without proceedings)

Total citations: 706, including ~120 self-citations, according to google scholar accessed on October 17th 2012 (see <http://scholar.google.com/citations?hl=en&user=V5kWvU4AAAAJ>).

Total co-authors: 45

Public presentations

- Keynote talks**
- Symposium on «Reclaiming the Internet» with distributed architectures: rights, technologies, practices, innovation**, ADAM project, Paris, October 2-3, 2014
Local networks for local interactions: four reasons why and one way forward
 - KiVS 2009 - Testbed Infrastructures Workshop**, Kassel, Germany, March 6th 2009
The OneLab2 project and research on federations
 - FIREworks Strategy Workshop**, Paris, France, September 11th 2008
The economics of testbed federation: The case of PlanetLab
- Invited talks**
- Commons Fest 2015**, Athens, May 16th 2015
DIY networking
 - FLOSS4P2P workshop**, FabLab, London, March 16-17th, 2015
Offline networks
 - Community Now? Symposium, Berlin University of the Arts**, February 19-21st, 2015
NetHood: Being together in the hybrid city (with Ileana Apostol)
 - Collective intelligence for the common good - Establishing an Open Research and Action Community Network, London**, The Open University, September 29th 2014
Collective awareness as a public good
 - IFIP TC6 2014/2 Strategic Review Meeting**, Dagstuhl Schloss, Germany, November 13th, 2014
Local networks for local interactions and the project NetHood
 - Design Research Lab, Berlin University of the Arts**, Berlin, June 2nd 2014
From smart cities to engaged citizens
 - University of Milano-Bicocca, Department of systems and communications**, June 6th 2015, “*Being together in the hybrid city*”, *Windows for collaboration between computer science and urban planning*
 - University of Thessaly, joint seminar between the department of informatics and urban planning**, Volos, May 6th, 2014, *From smart cities to engaged citizens*
 - Napier University, Group of Interaction Design**, Edinbrough, February 21st 2014
Thinking outside the Internet: From DIY Networking to Interaction Design
 - Singapore University of Technology and Design**, Singapore, November 12th 2013
The Neighbourhood Game: From Behavioural Economics to Urban Planning
 - University of Bristol, Systems Seminar**, Bristol, UK, June 18th 2013
The Neighbourhood Game: From Behavioural Economics to Urban Planning
 - University of Athens Seminar**, Athens, Greece, April 25th 2013
The Neighbourhood Game: From Behavioural Economics to Urban Planning
 - University of Zurich, Communication Systems Group seminar**, Zurich, August 17th 2011
Federation of Virtualized Infrastructures: Sharing the Value of Diversity
 - ETH Zurich, Communication Systems Group seminar**, Zurich, July 21st 2011
Incentive mechanisms in networking: from economics to social psychology
 - Parallel and Distributed Systems Group seminar**, Delft university, Delft, Netherlands, June 24th 2011
Incentives for P2P systems: from economics to social psychology
 - Columbia University Joint CS/EE Networking Seminar Series**, New York, USA, November 16th 2010
Federation of Virtualized Infrastructures: Sharing the Value of Diversity
 - Princeton University, PlanetLab Office public talk**, Princeton, USA, November 12th 2010
The value of federation and how to share it
 - T-labs Networking Series**, Berlin, Germany, July 6th 2009
NetHood: Bridging the virtual with the physical space.
 - Dagstuhl seminars 09072 and 08043 on Bandwidth on Demand and Telecommunication economics**, Dagstuhl, Germany, February 8th 2009, January 24th 2008
Resource allocation and provision in non-profit network facilities (Visionary talk)
Cross-layer Incentive Mechanisms: The Case of Self-organized Neighborhood Wireless Mesh Networks
 - Paris Networking brainstorming workshop “Universalizing Incentive Mechanisms for collaborative communication” session lead by Prof. George Varghese**, Paris, France, July 24th 2008
Incentive mechanisms for p2p systems
 - Workshop on experimental platforms for Internet resilience, security stability**, Brussels, June 19th 2009
OneLab2 and PlanetLab Europe

- Conferences/ Workshops**
- Inaugural conference of the World Interdisciplinary Network for Institutional Research (WINIR)**, September 11-14th 2014, Greenwich, London, UK.
 - CAPS 2020 conference, workshop on Networked Individualism**, Brussels, July 2nd 2014,
 - World Social Science Forum, Panel on "Privacy and Surveillance"**, Montreal, October 13-15th, 2013.
 - 15th International Conference on Social Dilemmas (ICSP)**, Zurich, July 10-13th, 2013.
 - Annual conference of the International Network for Urban Action and Research (INURA)**, Lisbon/Coimbra, June 23-29th 2013
 - Joint AESOP/ACSP Planning Congress, Track on "Spatial and Planning Analysis Methods in a Digital World"**, Dublin, Ireland, July 15-19th, 2013.
 - International Conference on "Using ICT, Social Media and Mobile Technologies to Foster Self-Organisation in Urban and Neighbourhood Governance"**, Delft, May 16-17th, 2013.
 - 1st International Conference on Internet Science**, Brussels, April 10-11th, 2013
 - ACM ExtremeCom 2012**, Zurich, Switzerland, March 14th 2012
 - ACM CoNEXT 2010**, Philadelphia, USA, December 2nd 2010
 - NSF-FIRE Workshop on Federating Computing Resources**, Princeton University, USA, May 11th 2010
 - Workshop on Wireless Community Networks**, Hangzhou, China, August 28th 2008
 - Real Overlays and Distributed Systems (ROADS) Workshop**, Warsaw, Poland, July 11th 2007
 - International Workshop on Dynamic Communities**, Lyon, France, October 29th 2007
 - 2nd Workshop on the Economics of Peer-to-Peer Systems**, Harvard University, Boston, USA, June 5th 2006
 - e-IRG workshop**, Linz, Austria, April 11th 2006
 - International Workshop on Agents and Peer-to-Peer Computing (AP2PC)**, Bologna, July 15th 2002
- Seminars**
- Dagstuhl seminar 14471: Towards an Affordable Internet Access for Everyone: The Quest for Enabling Universal Service Commitment**, Dagstuhl Schloss, Germany, November 18th, 2014, *An interdisciplinary perspective on DIY networking: the case of the Internet Jukebox*
 - UPMC Sorbonne Universités Group de travail «Initialization à la recherche»**: *Neighborhood wireless communities* (April 2007), *Federation of experimental facilities* (April 2008), *Federation economics: sharing the value of diversity* (May 2009).
 - INRIA Group de travail "Réseaux sociaux en pair à pair" (GEMO group)**, Paris, January 14th 2009
Social software for p2p systems: The case of wireless neighbourhood communities.
 - InfSo/Dimes Seminar on Future Internet and Living Labs**, Brussels, Belgium, April 2nd 2009
OneLab2 and the Federation Concept
 - Seminar on "Public Space: Theory, Policy, and Design"**, University of Southern California (USC), Los Angeles, USA, April 3rd 2008.
Community Building over Neighborhood Wireless Mesh Networks
 - Paris Networking Seminar**, Paris, September 8th 2006
Resource allocation and provision in the Internet: economic modeling and incentive mechanisms
- Panels**
- International Summit for Community Wireless Networks**, Berlin, October 3rd, 2013.
Panel Location Versus Locality: Building Applications for Neighborhood Mesh Networks
 - ACM CoNEXT 2008 Student Workshop**, Madrid, Spain, December 12th 2008
Panel on the importance of reviews and PC meeting.
- Demos/ Tutorials**
- TridentCom conference**, Thessaloniki, Greece, June 11th, 2012.
MySlice/SFA Tutorial
 - 12th GENI Engineering Conference (GEC 12)**, Kansas City, US, November 2nd, 2011.
Demonstrated the MySlice web interface over the Slice-based Facility Architecture (SFA)

Professional activities

- Organizing committee** First Interdisciplinary Workshop on DIY networking, co-located with ACM Mobisys conference, Florence, May 18th, 2015; LSE workshop on Alternative Internet(s), London School of Economics, 15-16th September 2014; 3rd EINS summer school - From smart cities to engaged citizens, Volos, Greece, July 13-20th 2014; Dagstuhl seminar - DIY networking: an interdisciplinary approach, Dagstuhl Schloss, Germany, January 19-22th, 2014; 3rd IFIP/IEEE International Workshop on Bandwidth on Demand and Federation Economics, April 2010, Japan; Dagstuhl Seminar 09072 Bandwidth on Demand, February 2009, Schloss Dagstuhl, Germany; 2nd IEEE International Workshop on Bandwidth on Demand (BoD 2008), April 2008, Salvador da Bahia, Brazil.
- TPC Member** ACM ExtremeCom 2015; IFIP Networking 2013, International Workshop on Network Control and Optimization, NET-COOP 2008, 2009; Shadow TPC, ACM Conext 2008, December 2008, University Carlos III & IMDEA Networks, Madrid, Spain; 2nd International Conference on Autonomous Infrastructure, Management and Security Resilient Networks and Services (AIMS), 2008; 1st IEEE International Workshop on Bandwidth on Demand (BoD), 2006, in conjunction with IEEE GLOBECOM 2006.
- Reviewer** Computer Networks Journal, Elsevier, IEEE/ACM Transactions on Networking, IEEE Transactions on Parallel and Distributed Systems, Computer Communications Journal, Elsevier, Peer-to-Peer Networking and Applications Journal, Springer, Data & Knowledge Engineering (DKE) Journal, IEEE INFOCOM Conference, IEEE Communications Society, International Communications Conference (ICC), IEEE Communications Society, International Conference on Advances in P2P Systems (AP2PS), International Conference on Game Theory for Networks (GameNets), International Telegraphic Congress (ITC), Aspects Algorithmiques des Télécommunications (Algotel).

Teaching experience

- Co-supervisor** **UPMC Sorbonne Universités, Paris, France**
Alexandru Tatar (PhD, started in 2010), Jonggun Lee (PhD, 2010), Ahmed Arous (Master, 2009), Dorra Kchouk (Master, 2009), Qinna Wang (Master, 2008), Nadjet Belblidia (Master, 2008), Abdelhamid Salah Brahim (Master, 2008)
- Athens University of Economics and Business, Greece**
Eustratios Haralambakos (Master, 2005), Georgios Gegos (Master, 2005), Ekaterini Alexopoulou (Master, 2004), Costas Kalogiros (Master, 2004), Georgios Kouroupas (Master, 2004), Dionisios Depranis (Master, 2003)
- Teaching assistant** **UPMC Sorbonne Universités, Paris, France (88 hours)**
- Group de travail «Initialization à la recherche» (post-graduate) (2011-2012)
Weekly seminars, assessment of final project
 - Multimedia Applications (post-graduate) (2011-2012)
Weekly seminars, assessment of final project
- Athens University of Economics and Business (476 hours)**
- Network Economics (post-graduate) (2000-2006)
Lectures, weekly seminars, correction of assignments, assessment of final project
 - Algorithms [EPL331] (2001-2006)
Weekly seminars, correction of assignments
 - Introduction to computer science [EPL131] (2000-2006)
Weekly seminars, correction of assignments, laboratory notes, definition assessment of final project
- Computer Science Department, University of Crete (160 hours)**
- High-speed networks and multimedia [HY533] (1999)
Correction of assignments based on the simulation tool CSIM
 - Compilers [HY340] (1997, 1998)
Weekly seminars, correction of assignments, assessment of final project
 - Programming [HY140] (1998)
Correction of programming assignments

Instructor	DP studies education center (92 hours) <ul style="list-style-type: none"> • Powerpoint and Internet <i>Instructor</i> IIEK PRAXI (140 hours) <ul style="list-style-type: none"> • Applications in SQL/4GL <i>Instructor</i>
Other	Translation , “ <i>Elements of the Theory of Computation</i> ” (second edition) by Lewis and Papadimitriou, Prentice Hall, published by Kritiki publications (Greece), 2005.

Awards and Scholarships

Sep 2006	Post-doc scholarship for one year from the Centre National de la Recherche Scientifique (CNRS).
Oct 2004	Scholarship for participation at the summer school “Algorithmic Aspects of Game Theory in Large Scale Networks”, October 11-15 th 2004, Santorini, Greece.
Jul 2003	Scholarship for participation at the “The Onassis Foundation 2003 Lectures in Computer Science: Internet and Web: Crawling the Algorithmic Foundations”, July 7-11th 2003, Heraklion, Greece.
Feb 1998	First “Ericsson Award of Excellence in Telecommunications” for diploma thesis “Implementation and evaluation of a CORBA manager for charging ATM Networks”, University of Crete, Heraklion, Greece.
Sep 1997	Graduation with rank 2 nd out of 53, University of Crete, Heraklion, Greece.

Languages

Fluent in English and French; Basics in German; Comprehension in Spanish, and Romanian; Native: Greek

Personal Interests

Photography, trumpet, psychology, traveling, hiking, music, swimming.