Curriculum Vitae

Mónica Aguilar Igartua
December 14th, 2013

**General information**

*Nationality:* Spanish  
*Gender:* Female  
*Birth date:* 6th May 1969  
*Current position:* Associate Professor  
*University:* Technical University of Catalonia (UPC)  
*Department:* Telematics Engineering  

*Address:* Jordi Girona 1, 08034, Barcelona, Spain  
*E-mail:* monica.aguilar@entel.upc.edu  
*WEB:* http://globus.upc.es/~maguilar/  
*Phone number:* +34 934015997  
*FAX number:* +34 934011058

**Professional experience**

- 2001- : Associate professor at UPC.  
- 1995- : Member of the Telematic Services research group at UPC (http://sertel.upc.es/)  
- 2003-2009: First recognized six year period of researching activity  
- 1995-2001: Assistant professor at UPC.

**Research interests**

Her research activity includes these topics:  
- Smart Cities, ITS (Intelligent Transportation Systems)  
- Design, analytical modelling and performance evaluation of multihop adhoc networks, such as MANETs (Mobile Ad hoc Networks) and VANETs (Vehicular Ad hoc Networks)  
- Design of routing protocols for MANETs and VANETs  
- Dynamic self-configured QoS-aware schemes to provide video-streaming services over multihop adhoc networks  
- Multipath routing protocols for video-streaming services over MANETs  
- Game-theoretical approaches to allocate resources in constrained networks  
- Privacy in MANETs and VANETs
Education

  *Escola Tècnica Superior d’Enginyeria de Telecomunicació de Barcelona* (ETSETB).

- **PhD in Telematics Engineering**: 21st January 2000. Technical University of Catalonia (UPC)

- **Diploma in Formation of Lecturers**: 1995-1996. Technical University of Catalonia (UPC)

Teaching (since 2009)

- Lectures in the Degree in Telecommunications Engineering of the ETSETB:
  - Introduction to Communication Networks (2013-present)
  - Quality of Service Engineering in IP networks (2013-present)

- Lectures in the Master in Telematics Engineering:
  - Evaluation of Packet Switching Networks (2009-2012)

- Lectures in the Master in Telecommunications Engineering (MET):
  - Quality of Service in Networks (2010-present)

Research projects (since 2005)


Publications (since 2009, except JCR which are all included)

JCR publications

1. Carolina Tripp-Barba, Luis Urquiza Aguiar, Mónica Aguilar Igartua, "Design and evaluation of GBSR-B, an improvement of GPSR for VANETs", *IEEE Latin America Transactions*, ISSN: 1548-0992, Vol. 11,


**Journals**


**Conferences**

1. Carolina Tripp Barba, Ahmad Mohamad Mezher, Mónica Aguilar Igartua, Isabelle Guérin-Lassous, Cheikh Sarr, "Available Bandwidth-aware Routing in Urban Vehicular Ad-hoc Networks", The 76th IEEE Vehicular Technology Conference (VTC-Fall 2012), Accepted, publication pending, Québec, Canada, 3d-6th September 2012.

2. Carolina Tripp Barba, Miguel Ángel Mateos, Pablo Regañas Soto, Ahmad Mohamad Mezher, Mónica Aguilar Igartua, "Smart city for VANETs using warning messages, traffic statistics and intelligent traffic lights", The Intelligent Vehicles Symposium (IV 2012), Alcalá de Henares, Spain, 3d-7th June 2012.


In Spanish


**Tutored PhD Thesis (since 2009)**

**Co-Tutored PhD Thesis**

**Tutored PhD Thesis**

**Doctoral candidates**
- "Contribution on the design of efficient frameworks to improve the provision of multimedia services over Vehicular Ad Hoc Networks", by Ahmad Mezher, to be finished in 2015.
- "Contribution to provide video-streaming services over wireless adhoc networks in smart cities", by Luis Urquiza, to be finished in 2015.

**Other activities (since 2009)**

**Journal reviewer**
- IEEE Communications Magazine
- IEEE Transactions on Vehicular Technology
- Ad Hoc Networks
- Computer Communications
- Wireless Communications and Mobile Computing
- Computer Standards and Interfaces
- Applied Mathematical Modelling
**Conference reviewer**

- Spanish Conference on Telematics Engineering (Jornadas de Ingeniería Telemática), 2001-present
- Fifth International Conference on Availability, Reliability and Security (ARES 2010 – The International Dependability Conference).

**Member of the Editorial Board of:**

- The IEEE Transactions on Multimedia. 2011-2013

**General-Chair:**

- The Tenth ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor and Ubiquitous Networks (PE-WASUN 2013)

**Vice General-Chair:**


**Co-Chair:**


**Program Committee Member**

- Workshop on management of emerging networks, hold with GlobeCom 2010, 6th-10th December, Miami, Florida, USA.
- The Second International Workshop on Interconnections of Wireless Sensor Networks (IWSN 2011)
- The First International Workshop on Interconnections of Wireless Sensor Networks (IWSN 2010)
- The Third International Workshop on Interconnections of Wireless Sensor Networks (IWSN’12)
- Quinta Conferencia Colombiana de Comunicaciones 2012 (COLCOM 2012)
- Vehicular Communication Systems (VCS) track of Mosharaka International Conference on Communications, Networking and Information Technology (MIC-CNIT 2012)
- 2012 IEEE Symposium on Wireless Telecommunications Applications (ISWTA 2012)
- VI Andean Region International Conference (Andescon 2012)
- The Third International Conference on Communications and Information Technology (ICCIT-2013): Mobile and Cloud Computing
- The Fourth International Conference on Computer Applications (ICCA 2013)
- The 2013 IEEE International Conference on Internet of Things (iThings 2013)
- V Congreso Internacional de Computación y Telecomunicaciones (COMTEL 2013)
- The 5th IEEE International Workshop on Management of Emerging Networks and Services (IEEE MENS 2013)
- The 57th IEEE Global Communications Conference (IEEE GLOBECOM 2014)

**International Collaborations**

- Host professor of the Mobility Grant funded by the Spanish Government, conceded to Dr. Isabelle Guérin-Lassous, Department of Computer Science, Université Lyon I, Lyon, FRANCE, 6th to 10th June 2011.
- Invited professor in the Ecole Normal Supérieure de Lyon (ENS LYON). Research done with the professor Isabelle Guérin Lassous in the LIP (Laboratoire de l'Informatique du Parallélisme), FRANCE, 31st May 2010 to 11th June 2010.
- Host professor of the Mobility Grant funded by the Spanish Government, conceded to Dr. Andrea Goldsmith, Department of Electrical Engineering, Stanford University, Palo Alto, California, USA, 13th to 17th July 2009.
- Host professor of the Mobility Grant funded by the Spanish Government, conceded to Dr. Isabelle Guérin-Lassous, Department of Computer Science, Université Lyon I, Lyon, FRANCE, 15th to 18th June 2009.
- Host professor of the Mobility Grant funded by the Spanish Government, conceded to Dr. Mihaela van der Shaar, EE Department, University of California Los Angeles (UCLA), Los Angeles, California, USA, 9th to 13th June 2008.
- Lectures in Networking Design, in the Master of Telematics of the Faculty of Engineering at the University of Cuenca, Ecuador. 3d-15th September 2007 (48h).

**Academic responsibilities**

- Member of the Council of the Telematics Engineering Department. 2000-
- Member of the Telecommunication Engineering School at UPC. 1996-2007.
- Member of the Board of the Telematics Engineering Department. 2003-
- Member of the Examining Board of the Doctorate Program in Electronics Engineering. 2003-2005.
- Member of the Examining Board of the Doctorate Program in Telematics Engineering. 2003-2005.

**Research Evaluations**

- Member of the Examining Board of CENIT (*Consorcios Estratégicos Nacionales en Investigación Técnica*) projects funded by the Spanish Government, October 2009.
- Reviewer of scientific projects for the ANEP (*Agencia Nacional de Evaluación y Prospectiva*) agency, funded by the Spanish Government. 2006-

**Thesis examining board (holding member)**

- Alejandro Martínez Sala, Departament of Information Technologies and Communications, Technical University of Cartagena (UPCT), 13th February 2006.
- Gerardo Gómez Paredes, “Modelling the performance evaluation of the end-to-end quality of service of streaming services over wireless networks”, University of Málaga (UMA), 8th June 2009.
- Manuel David Serrat Olmos, "Cooperation Techniques to Improve Peer-to-Peer Wireless Networks Security", Universidad Politécnica de Valencia (UPV), September 27th 2013. Director: Dr. Juan Carlos Cano.

**Professor examining board (holding member)**


- Lecturer professor, Telematics Engineering, AS-149,150/744 and AS-152/744, Technical University of Catalonia (UPC), 26th January 2004.


- Lecturer professor, Telematics Engineering, Technical University of Cartagena (UPCT), 14C/07/PCOL, 15C/07/PCOL, 16C/07/PCOL, 17C/07/PCOL, 18C/07/PCOL, 17th April 2007.