

# Andrés García Saavedra

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## WORK EXPERIENCE

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**2013– Currently**      **Research Fellow**  
Hamilton Institute  
National University of Ireland, Maynooth

## EDUCATION

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**2009 – 2013**      **Ph.D. in Telematics Engineering**  
University Carlos III of Madrid (Spain)  
Supervisor: Dr. Albert Banchs, Dr. Pablo Serrano

**September 2010**      **M.Sc. in Telematics Engineering**  
University Carlos III of Madrid (Spain)  
Supervisor: Dr. Albert Banchs, Dr. Pablo Serrano

**January 2009**      **B.Sc. in Telecommunications Engineering**  
University of Cantabria (Spain)  
Supervisor: Dr. Ramon Aguero

## PUBLICATIONS

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**Journals**

A. Banchs, A. Garcia-Saavedra, P. Serrano, J. Widmer. A Game-Theoretic Approach to Distributed Opportunistic Scheduling. **IEEE/ACM Transactions on Networking**, vol.21, no.5, pp.1553-1566, Oct. 2013.

D. Camps-Mur, A. Garcia-Saavedra, P. Serrano. Device-to-device communications with Wi-Fi Direct: overview and experimentation. **IEEE Wireless Communications Magazine**, vol.20, no.3, pp.96-104, June 2013.

A. Garcia-Saavedra, P. Serrano, A. Banchs, M. Hollick. Balancing energy efficiency and throughput fairness in IEEE 802.11 WLANs. **Elsevier Pervasive and Mobile Computing**, vol.8, no.5, pp.31-645, Oct. 2012.

**Conference**

A. Garcia-Saavedra, P. Serrano, A. Banchs, G. Bianchi. Energy consumption anatomy of 802.11 devices and its implication on modeling and design. The 8th international conference on Emerging networking experiments and technologies (**ACM CoNEXT 2012**), pp.169-180, Dec. 2012.

A. Garcia-Saavedra, A. Banchs, P. Serrano, J. Widmer. Distributed Opportunistic Scheduling: A control theoretic approach. The 31st International Conference on Computer Communications (**IEEE INFOCOM 2012**), pp.540-548, March 2012.

A. Garcia-Saavedra, P. Serrano, A. Banchs, M. Hollick. Energy-efficient fair channel access for IEEE 802.11 WLANs. The 12th International Symposium on a World of Wireless, Mobile and Multimedia Networks (**IEEE WoWMoM 2011**), pp.1-9, June 2011.

A. Garcia-Saavedra. Greening IEEE 802.11 channel access. The 12th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (**IEEE WoWMoM 2011**), Ph.D. Forum, pp.1,3, June 2011.

J. Lessmann, A. De La Oliva, C. Sengul, A. Garcia-Saavedra, M. Kretschmer, S. Murphy, P. Patras. On the scalability of carrier-grade mesh network architectures. The 20th **Future Network and Mobile Summit** pp.1-8, June 2011.

N. Bayer, K. Loziak, A. Garcia-Saavedra, C. Sengul, P. Serrano. CARMEN: resource management and abstraction in wireless heterogeneous mesh networks. ACM SIGCOMM 2010 conference (**ACM SIGCOMM 2010**), Demo session, pp.481-482. Aug. 2010.

P. Serrano, A. Garcia-Saavedra, M. Hollick, A. Banchs. On the energy efficiency of IEEE 802.11 WLANs. The 16th European Wireless Conference (**EW 2010**), pp.932-939, April 2010

#### Other

A. Garcia-Saavedra. Analysis and optimal configuration of distributed opportunistic scheduling techniques in wireless networks. **Ph.D. thesis**, University Carlos III of Madrid (UC3M), Nov. 2013.

A. Garcia-Saavedra. Energy-efficient fair channel access for IEEE 802.11 WLANs. **M.Sc. thesis**, University Carlos III of Madrid (UC3M), June 2010.

#### PROJECTS

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| <b>2011 – 2013</b> | <b>Collaboration with NEC Laboratories Europe</b><br>Power saving mechanisms and energy efficiency in WiFi networks            |
| <b>2011 – 2013</b> | <b>FLAVIA European Project (7<sup>th</sup> FWP)</b><br>Flexible Architecture for Virtualizable future wireless Internet Access |
| <b>2009 – 2011</b> | <b>CARMEN European Project (7<sup>th</sup> FWP)</b><br>CARMEN, CARrier grade Mesh Networks                                     |

#### TEACHING

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- **Theory of networks** (10/11, 11/12, 12/13): Introduction to probability, Markov models and queueing theory. B.Sc. Telematics Eng. University Carlos III of Madrid
- **Audiovisual mobile systems** (12/13): Introduction to wireless communication systems. B.Sc. Telematics Eng. University Carlos III of Madrid
- **Networks and Services** (09/10, 10/11, 11/12): General introduction to communication networks. B.Sc. Telematics Eng. University Carlos III of Madrid

#### OTHER

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- July 2012 – Dec. 2012** **Visitor scholar at University of Texas at Austin**  
Scheduling of resources in Cloud Radio Access Networks  
Under the supervision of Dr. Gustavo de Veciana