## Nuria Oliver, PhD

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## Education

Czerwinski

Education	
PhD with Honors in Media Arts & Sciences Massachusetts Institute of Technology (MIT) Thesis: "Towards Perceptual Intelligence: Statistical Modeling of Human Individual and Interactive Behaviors". Thesis Director: Prof. A. Pentland	2000
Superior Degree in Telecommunications Engineering (6 year degree) M.Sc./B.Sc. equivalent with Honors in Telecommunications Engineering Universidad Politécnica de Madrid (UPM) Majors in: Signal Processing and Telematics GPA: 9.2/10.0 First National Prize of Telecommunications Engineers	1994
Languages	
Spanish (native)	
English (bilingual): Superior Title by the Official School of Languages of Spain	1993
French (fluent): Superior Title by the Official School of Languages of Spain	1993
German (high level): ZMP title by the Goethe Institut	1994
Catalan (high level)	
Italian (beginner-medium level)	
Professional Experience	
Vodafone, London – Alicante Director of Research in Data Science Leadership position to define and carry out the research and innovation agenda in artificial intelligence and data science	2017- present
DataPop Alliance, New York, USA Alicante	2016-
Chief Data Scientist Strategic and technical leadership position in DataPop Alliance to provide technical feedback in the projects carried out by the NGO, give presentations, participate in research projects centered around Big Data for Social Good and to promote women empowerment projects and activities aimed at inspiring girls and female teenagers to pursue careers in technology	present
Telefónica I+D, Barcelona, Spain Scientific Director	2007 – 2016
Founder of an internationally recognized research team in the areas of mobile and ubiquitous computing, statistical machine learning, recommender systems and personalization, multimedia data analysis, human-computer interaction and Big Data analytics. Co-founder of the research organization within Telefonica R&D	2010
Microsoft Research, Redmond, WA, USA  Researcher in statistical machine learning, multi-modal user interfaces, intelligent user interfaces, wearable physiological monitoring and mobile computing. Worked with Dr. E. Horvitz and Dr. M.	2000 - 2007

Massachusetts Institute of Technology (MIT), Boston, MA, USA  Research Assistant in statistical machine learning, perceptual computing, pattern recognition, perceptual intelligence, computer vision and wearable computing. Worked with Prof. A. Pentland (thesis director)	1995 - 2000
GMD First (hoy Fraunhofer Institute), Berlin, Germany Visiting Researcher Theoretical work with Dr. B. Schölkopf and Dr. A. Smola on kernel methods, regularization theory and information geometry	1999
Telefónica I+D, Madrid, Spain Software Engineer Designed a system for monitoring traffic through telecommunication networks	1994 - 1995
Siemens I+D, Munich, Germany International Student Circle Fellow Parsers, grammars, compiler evaluations and contributions to the EU ESPRIT project called "Benchmarking for embedded control and real-time applications"	1992 - 1993

### **Professional Service**

Co-chair: 16 conferences (ACM/IEEE/IJCAI)

<u>General Conference:</u> Int. Conf. on User Modeling and Adaptation (UMAP) 2011 (today ACM UMAP); EAI Mindcare 2016; EAI Pervasive Health 2017; ACM MobileHCI 2018

<u>Technical Program:</u> ACM International Conference on Intelligent User Interfaces (IUI) 2009; ACM International Conference on Multimedia Information Retrieval (MIR) 2010

<u>Track:</u> ACM Int. Conf. on WWW 2013; ACM Int. Conf. on Multimedia (MM) 2014; IEEE Mobile Data Management 2016; ACM Digital Health 2016; ACM Int. Conf. on Multimedia (MM) 2017

Area: ACM Int. Conf. on Multimodal Interfaces (ICMI) 2012

Industry day: Int Joint Conference on AI (IJCAI) 2011

<u>Doctoral symposium (founder):</u> ACM Int. Conf. on Intelligent User Interfaces (IUI) 2012

Sponsorship: ACM Int. Conf. on Multimodal Interfaces (ICMI) 2011

Demo: IEEE Int. Conf. on Data Mining (ICDM) 2016

Member of the IUI oversight committee created in 2012 and commissioned to provide recommendations to the SIGART and SIGCHI leadership on how best to evolve the structure of IUI to help it continue to be a strong and successful conference

Member of the ACM KDD Doctoral Thesis award selection committee (2017)

### Member of the Program Committee (list only for 2014-2016)

Netmob 2015; UAI 2014-15; AAAI 2014-16; ACM WWW 2014, 2016; ACM IUI 2014-16; IEEE ICASSP 2014; ACM RecSys 2014-16; AAAI ICWSM 2014-16; ACM Ubicomp 2014-16; IEEE IWMV 2014; ACM MobileHCI 2015-16; ECML-PKDD 2015; ACM DH 2015; UMAP 2015; UAI 2014-15; IEEE SmartCities 2015

## Member of the Scientific Committee and Editorial Board

DTIC Department of the Univ Pompeu Fabra (2013-present)

Universidad Oberta Catalunya (UOC) Proyecto Avanza del Instituto Interdisciplinario de Internet (2009)

Member of the Editorial Board of ACM Transactions on Multimedia, TELOS magazine, Frontiers of Digital Health and Foundations and Trends in HCI, IEEE Transactions on Computational Systems

Member of the ethics panel of Orange D4D (2015)

Member of the Jury of MIT TR35 Young Innovator Awards (Spain and LATAM editions)

Member of Bankinter's Innovation Foundation Future Trends Forum (2006-present)

Research affiliate (2015) and Chief Data Scientist (2016) at DataPopAlliance

Chief Scientific Advisor at the Vodafone Institute (2017)

Member of the PhD thesis committee of Jose Luis Landabaso (UPC'08), Pere Obrador (UPC'11), Juan Pablo Carrascal (UPF'15), Ruth Garcia Gavilanes (UPF'15), Janette Lehman (UPF'15) and Albert Armisen (ESADE'17), among others

Member of a High Level Advisory Board to the Spanish Government regarding Spain's strategic plan in Scientific and Technology Research and Innovation (2017-2020)

# **Best Paper Awards and Nominations**

"LAFTER: A Real-time Face and Lips Tracker with Facial Expression Recognition" Oliver. N., Pentland, A. and Berard, F. Pattern Recognition 33 (8), 1369-1382 Winner of the Special Mention Award from the Pattern Recognition Society as an Outstanding Publication	2000
"CLiMF: Learning to Maximize Reciprocal Rank with Collaborative Less-is-more Filtering" Shi, Y., Karatzoglou, A., Baltrunas, L., Larson, M., Oliver, N. and Hanjalic, A. (2012) Proceedings of 6th ACM Int. Conf. on Recommender Systems (ACM RecSys'12), Dublin, Sept 2012, <b>Best Paper Award</b>	2012
"Money Walks: A Human-Centric Study on the Economics of Personal Data" Staiano, J., Oliver, N., Lepri, B., Oliveira, N., Caraviello, M. and Sebe, N. Proceedings of ACM Int. Conf. on Ubiquitous Computing (ACM Ubicomp'14). Seattle. Sept 2014, Best Paper Award	2014
"Layered representations for human activity recognition", Oliver, N., Horvitz, E. and Garg, A. Proceedings of IEEE Int. Conf. on Multimodal Interfaces (ICMI'02), 3-8, 2004, ACM ICMI Ten Year Technical Impact Award	2002
"When attention is not scarce: Detecting boredom from mobile phone usage" Pielot, M., Dingler, T., San Pedro, J. and <b>Oliver, N.</b> Proc. of ACM Int. Joint Conf. on Pervasive and Ubiquitous Computing (ACM Ubicomp'15), Osaka. Sept 2015, <b>Best Paper Award</b>	2015
"Lafter: Lips and face real time tracker", Oliver, N., Pentland, A.P., and Berard, F. Proceedings of IEEE Computer Vision and Pattern Recognition (CVPR'97), 1997, 123-129 Nominated to Best Paper Award. Best Presentation Award	1997
"MPTrain: A Music and Physiology-based Personal Trainer on your Mobile Phone" Oliver, N. and Flores-Mangas, F. Proceedings of ACM Int. MobileHCl'06, 21-28, Helsinki, Iceland, Sept 2006. Nominated to Best Paper Award	2006
"Text versus Speech: A Comparison of Tagging Input Modalities for Camera Phones", Cherubini, M., Anguera, X., Oliver, N. and Oliveira, R., Proc. ACM Int. Conf. on Mobile HCI (ACM MobileHCI'09), Bonn, Germany, Sept 2009, Nominated to Best Paper Award	2009
"Understanding Near-Duplicate Videos: A User-Centric Approach", Cherubini, M., Oliveira, R. and Oliver, N. (2009), Proceedings ACM Int. Conf. on Multimedia (ACM MM'09), Beijing, China, Oct 2009, Nominated to Best Paper Award	2009
"Social Tagging Revamped: Supporting the Users' Need of Self-promotion through Persuasive Techniques", Cherubini, M., Gutierrez, A., Oliveira, R. and Oliver, N. (2010), Proceedings ACM Int. Conf. on Human Factors in Computing Systems (ACM CHI'10), Atlanta, US, April 2010, Nominated to Best Paper Award	2010
"Multiverse Recommendation: N-dimensional Tensor Factorization for Context Aware Collaborative Filtering" Karatzoglou, A., Amatriain, X., Baltrunas, L. and Oliver, N. (2010) Proceedings of ACM Int. Conf. on Recommender Systems (ACM RecSys'10), Barcelona, Sept 2010, Nominated to Best Paper Award	2010

# **Patents**

Inventor of 40 granted or filed patents.

Patent App #	
US 11/864,599	Get prep questions to ask a doctor
US 11/559,794	Space time trail annotation and recommendation
US 11/535,822	Window Grouping
US 11/426,830	Providing user information to introspection
US 11/426,804	Activity centric adaptive user interface
US 11/426,818	Monitoring group activities
US 11/426,796	Activity centric domain scoping
US 11/426,839	Resource availability for user activities across devices
US 11/426,827	Creating and managing activity-centric workflow
US 11/426,832	Capture of process knowledge for user activities
US 11/426,788	Activity-centric granular application functionality
US 11/426,846	Logging user actions within activity context
US 11/426,810	Managing activity centric environments via profiles
US 10/968,861	Parsing location histories
US 10/729,464	Systems and methods for guiding allocation of computational resources in automated perceptual systems
US 10/724,950	Architecture for controlling a computer using hand gestures
US 10/183,774	Layered models for context awareness
US 11/407,645	Algorithms for computing heart rate and movement speed of a user from sensor data
US 11/407,493	Using music to influence a person 's exercise performance
US 11/195,338	Mobile, personal, and nonintrusive health monitoring and analysis system
US 11/407,618	Algorithm for providing music to influence a user 's exercise performance
US 11/934,522	Mobile Exercise Enhancement with Virtual Competition
US 10/180,770	Maximizing mutual information between observations and hidden states to minimize classification errors
US 10/183,774	Layered models for context awareness
US 13/356,846	Method to assess aesthetic quality of photographs
US 13/821,329	Method for the classification of images

US 12/457,656	System and method for executing a game process
US 13/098,515	Method for an automatic identification of urban dense areas from cell phone records
EP20120722321	Method of characterizing a social network communication using motifs
US 13/807,375	Method for classification of videos
US 13/026,648	Medication compliance using persuasive computing
US 13/640,527	Method and system for facilitating exchange of items in a network
US 13/098,801	Method for automatic storytelling for photo albums using social network context
US 13/177,615	Customer Cognitive Style Prediction Model Based on Mobile Behavioral Profile
US 13/014,099	Real-time music to music-video synchronization method and system
PCT/EP2011/001382	Multiverse recommendation method for context-aware collaborative filtering
EP20090382209	Denoising explicit feedback for recommender systems
PCT/EP2011/067091	System and method for multiperspective telepresence communication
EP20090382213	Method for detecting audio and video copy in multimedia streams
EP20130382536	Method for predicting reactiveness of users of mobile devices for mobile messaging

# Selection of Publications (20 most cited)

More than 100 publications, which have been cited more than 11000 times according to Google Scholar: <a href="http://tinyurl.com/q3h5sgr">http://tinyurl.com/q3h5sgr</a>. According to Google Scholar would be one of the most cited female computer scientists in Spain.

<i>"A Bayesian computer vision system for modeling human interactions"</i> , <b>Oliver, N.</b> , Rosario, B. and Pentland, A.P. Pattern Analysis and Machine Intelligence, IEEE Transactions on 22 (8), 831-843	2000 [cited by 1631]
"Image analogies", Hertzmann, A., Jacobs, C.E., Oliver, N., Curless, B., and Salesin, D.H. Proceedings of 28 <sup>th</sup> ACM Int. Conf. on Computer Graphics and Interactive Techniques (SIGGRAPH'01), 2001, 327-340	2001 [cited by 1412]
"Coupled hidden Markov models for complex action recognition", Brand, M., Oliver, N. and Pentland, A.P. Proceedings of IEEE Int. Conf. on Computer Vision and Pattern Recognition (CVPR'97), 1997, 994-999	1997 [cited by 1192]
"Multiverse recommendation: n-dimensional tensor factorization for context-aware collaborative filtering", Karatzoglou, A., Amatriain, X., Baltrunas, L., and <b>Oliver, N</b> . Proceedings of the 4 <sup>th</sup> ACM Conference on Recommender Systems (RecSys'10), 2010, 79-86	2010 [cited by 388]
"Layered representations for learning and inferring office activity from multiple sensory channels", Oliver, N., Garg, A. and Horvitz, E. Computer Vision and Image Understanding 96 (2), 163-180	2004 [cited by 379]
"Layered representations for human activity recognition", Oliver, N., Horvitz, E. and Garg, A. Proceedings of 4 <sup>th</sup> IEEE Int. Conf. on Multimodal Interfaces (ICMI'02), 3-8, 2002, <b>ACM ICMI Ten Year Technical Impact Award</b>	2002 [cited by 358]
"Lafter: Lips and face real time tracker", Oliver, N., Pentland, A.P., and Berard, F. Proceedings of IEEE Computer Vision and Pattern Recognition (CVPR'97), 1997, 123-129	2004 [cited by 349]
"Graphical models for driver behavior recognition in a smartcar", Oliver, N. and Pentland, AP. Proceedings of IEEE Intelligent Vehicles Symposium (IV'00), 2000, 7-12	2000 [cited by 274]

"HealthGear: a real-time wearable system for monitoring and analyzing physiological signals", Oliver, N. and Flores-Mangas, F. Proceedings of IEEE Int. Symposium on Wearable and Implantable Body Sensor Networks (BSN'06), 2006, 4	2006 [cited by 239]
"Lafter: A real-time face and lips tracker with facial expression recognition", <b>Oliver, N.</b> , Pentland, A.P., and Berard, Pattern Recognition 33(8), 1369-1382	2000 [cited by 177]
"Sensing and Predicting the Pulse of the City through Shared Bicycling" Froehlich, J., Neumann, J. and Oliver, N. Proceedings of Int. Joint Conf. on Artificial Intelligence (IJCAI'09), 2009, 1420-1426	2009 [cited by 176]
"CLiMF: Learning to Maximize Reciprocal Rank with Collaborative Less-is-more Filtering" Shi, Y., Karatzoglou, A., Baltrunas, L., Larson, M., Oliver, N., and Hanjalic, A., Proceedings of ACM Int. Conf. con Recommender Systems (RecSys'12), 2012, 139-146 Best paper award	2012 [cited by 163]
"MPTrain: a mobile, music and physiology-based personal trainer", Oliver, N. and Flores-Mangas, F. Proceedings of the 8 <sup>th</sup> ACM Conference on Human-computer Interaction with Mobile Devices and Services (MobileHCl'06), 2006, 21-28	2006 [cited by 163]
"Curve Analogies" Hertzmann, A., Oliver, N., Curless, B., Seitz, S., Proceedings of ACM Int. Conf. on Computer Graphics and Interactive Techniques (ACM SIGGRAPH'02), 2002, 233-246	2002 [cited by 151]
"I like itI like it not: Evaluating user ratings noise in recommender systems" Amatriain, X., Pujol, J.M. and <b>Oliver, N.</b> , Proceedings of Int. Conf. on User Modeling, Adaptation and Personalization (UMAP'09), 2009, 247-258	2009 [cited by 142]
<i>"TFMap: Optimizing MAP for top-n context-aware recommendation"</i> Shi, Y., Karatzoglou, A., Baltrunas, L., Larson, M., Hanjalic, A. and <b>Oliver, N</b> .	2012 [cited by 123]
"The Wisdom of the Few: a Collaborative Filtering Approach based on Expert Opinions from the Web" Amatriain, X., Lathia, N., Pujol, J.M., Kwak, H. and Oliver, N., Proceedings of ACM Int. Conf. on Recommender Systems (RecSys'09), 2009, 532-539	2009 [cited by 96]
"TripleBeat: Enhancing Exercise Performance with Persuasion" de Oliveira, R., and Oliver, N., Proceedings of ACM Int. Conf. on Human-computer Interaction with Mobile Devices and Services (MobileHCl'08), 2008, 255-264	2008 [cited by 121]
"Data mining methods for recommender systems" Amatriain, X., Jaimes, A., Oliver, N., and Pujol, J.M., Chapter in the book "Recommender Systems Handbook", 2011, 39-71	2011 [cited by 120]
"3D Modeling and Tracking of Human Lip Motions" Basu, S., Oliver, N., Pentland, A, Proceedings of IEEE Int. Conf. on Computer Vision (ICCV'98), 1998, 337-343	1998 [cited by 116]
Awards and Honors	
IEEE Fellow	2017
IMPORTANTE award by Informacion	2017
Spanish National Award in Computer Science (Angela Ruiz Robles award)	2016
European Digital Woman of the Year	2016
Fellow of the European Association of Artificial Intelligence	2016
Top100 Award in the Academics and Scientists Category	2016
Gaudi Gresol Award to Excellence in Science and Technology	2016
Ada Byron Award by University of Deusto (Spanish National Award)	2016
Salvà i Campillo Award to 2015 most outstanding technology professional	2016
ACM Distinguished Scientist	2015
ICT Woman 2015 (by the Catalan Government)	2015
ACM ICMI Ten Year Technical Impact Award	2014
IEEE Senior Member	2014
ACM Senior Member	2013
Rising Talent by the Women's Forum for the Economy and Society	2009

MIT TR100 (today TR35) Young Innovator Award by MIT Technology Review	2004
Motorola Fellow	1997-98
"La Caixa" Foundation Fellow	1995-97
First National Prize of Telecommunication Engineers	1994
First Prize of Telecommunications Engineers at the ETSIT in UPM	1994
Siemens International Student Circle Fellow	1992-94

## Media Coverage

2008

2007

2007

My profile, my work and my team's work have been featured in more than 100 nationally and internationally media articles (press, radio, TV and digital media), such as BBC News, WIRED, MIT Technology Review, The Economist, El PAIS, El Mundo, Actualidad Económica, Revista Capital, RTVE, RNE, Expansión, MUY INTERESANTE, National Public Radio and ABC Good Morning America.

A complete list of media coverage can be found here: http://www.nuriaoliver.com/press.htm, from which a selection is shown below:

is shown	n below:
2017	INFORMACION newspaper, "Nuria Oliver" extensive profile interview
2017	La Vanguardia (back page), "Nuria Oliver"
2017	EL PAIS newspaper, "Big Data: Antidote against corruption?"
2016	La Vanguardia newspaper, "We depend on Artificial Intelligence"
2015	EL PAIS Sunday Magazine, in-depth 6-page interview
2015	MUY INTERESANTE magazine, interview about "Artificial Intelligence"
2015	MIT Technology Review, "Your Smartphone can tell if you are bored"
2015	RNE Radio 3, "Science with Nuria Oliver, Artificial Intelligence"
2015	Featured as one of four "Women in success" by Glamour magazine
	"Special report economy: Interview with digital entrepreneur Nuria Oliver" by the Women's Forum for the many and Society
2015	Interview for EL MUNDO newspaper: "Predicting future crimes with 70% accuracy through Big Data"
2014	Actualidad Económica Magazine: "A mine of data and good actions"
2014	TechCrunch, "Using Big Data to Fight Pandemics"
2014 worth"	MIT Technology Review, "Researchers test personal data market to find out how much your information is
2013	WIRED 2013: "What big data and the Mexican pandemic taught us"
	EL PAIS Sunday Magazine: "Female Energy: nine Spanish female technology leaders", selected as one of who are leaders in technology companies
2009	Capital Magazine: Named one of "100 leaders for the future"
2008	Interview for RNE "Nuria Oliver, Artificial Intelligence expert", RNE3

"The brain that changed our world" by David Dusster, interview for La Vanguardia newspaper

Expansión Newspaper "Nuria Oliver leaves Bill Gates for Alierta"

Interview and demo for ABC "Good morning America", NYC

- 2006 EL PAIS Sunday Magazine: "Travel inside Microsoft"
- 2005 RTVE, "De Cerca" program, one-hour TV interview about "Artificial Intelligence"
- 2005 "Nuria Oliver", long interview for the economy magazine Actualidad Economica
- 2004 EL PAIS newspaper: "A Spaniard on the digital summit"
- 2004 MIT Technology Review, "TR100 Young Innovators of 2004"

### Articles authored for the media (selected)

2015 EL PAIS newspaper, "The mobile phone changes its skin", article for EL PAIS. Most read article the week that it was published and in the top 10 most popular technology articles in EL PAIS in 2015

- 2014 TechCrunch, "Using Big Data to fight pandemics"
- 2013 The Guardian, "Combatting global epidemics with Big Data"

## Selected Keynotes at Scientific Conferences

A complete list can be found here: http://www.nuriaoliver.com/invitedtalks.htm

Keynote speaker at IEEE IntelliSys Conference, "Data-driven Machine-learning Models of Individual and Aggregate Human Behavior", London, UK, 2017

Keynote speaker at IEEE Int. Conf. on Intelligent Environments, "Data-driven Machine-learning Models of Individual and Aggregate Human Behavior", London, UK, 2016

Keynote speaker at the Big Data workshop in the 1<sup>st</sup> European Celebration of Women in Computing, Brussels, 2016

Keynote speaker at CAEPIA, "Data-driven Machine-learning Models of Individual and Aggregate Human Behavior" Albacete, 2015

Keynote speaker at IEEE Int Conf on Data Science and Advanced Analytics, "Towards Individual and Aggregate Models of Human Behavior from Data in the Real-world" Paris, 2015

Keynote speaker at NetSci BackStage, "Big Data for Social Good: Opportunities and Challenges" Zaragoza, 2015

Keynote speaker in 5th ACM International Conference on Digital Health, "Towards better health with mobile computing" Florence, 2015

Keynote speaker at ICEIS 2015, "Data-driven Models of Human Behavior" Barcelona, 2015

Keynote speaker at Int Conf NTTS, "Human Behavior Modeling from Big Data" Brussels, 2015

Keynote speaker at ITU WTIS 2014 Global Conference on Big Data for Development, "Big Data for Social Good: Opportunities and Challenges" Georgia, 2014

Keynote speaker at ACM y IEEE Int Conf MODELS 2014, "Towards data-driven models of humans" Valencia, 2014

Keynote speaker at Microsoft's Innovation Outreach Program, "The Future of Mobile Computing" Barcelona, 2014

Keynote speaker at New Frontiers in Digital Technologies for Influenza, "Big Data and the H1N1 flu pandemic" London, 2014

Keynote speaker at European Wireless Conference, "Small Devices for Big Impact" Barcelona, 2014

Keynote speaker at IEEE EUSIPCO 2011, "Towards Smart Cities" Barcelona, 2011

Keynote speaker at Big Learning Workshop in NIPS, "Towards human behavior understanding from pervasive data: opportunities and challenges", NIPS, Granada, 2011

Invited speaker at IEEE WCCI, workshop on Computational Intelligence in Computer Vision, July 2010

Keynote speaker at Activity Recognition and Discovery Workshop in NIPS, "S-SEER: Office activity recognition with a layered representation and selective perception", NIPS, Vancouver, 2005

Keynote speaker at Int Conf on Visual Computing (Visual 2000), "Towards Perceptual Intelligence" Mexico DF, Mexico, 2001

Keynote speaker for Barcelona's Science Week, "The MIT Media Lab: The Most Advanced Technological Research" Barcelona, 1999

## Selected Invited Talks (non-scientific)

### To Government Bodies

Keynote speaker at IAPP Europe Data Protection Congress, "Big Data for Social Good", Brussels, 2016

Invited panelist at OECD/PARIS21 Workshop on Access to New Data Sources for Statistics, Paris, 2015

Invited panelist at the panel "How to nurture women in the development of the digital economy" with the participation of the Colombian vice-minister of technology, M. Isabel Mejia. Colombia. 2015

Co-author of a proposal for a computer science curriculum for Spanish students starting at 5 years old, based on the British curriculum, shared with several schools in Spain and representatives of the Catalan Government (2014-2015)

Invited speaker at a conference about Research Policies organized by the Ministry of Science and Technology, "Research in Science and Technology: Opportunities and Challenges" Santander University, Santander, 2005

Invited speaker for Valencia's strategic city plan, "Cities of Atoms and Bits", Palace of Congress, Valencia, Spain, 1999

Invited speaker for the Spanish Senate, special commission of Computer Networks, "Research at the MIT Media Lab", Spanish Senate, Madrid, 1998

### To a Specialized Audience

Keynote speaker at Columbia University Alliance Summer School: Research Methods in Sustainable Development, "Mobile Data for Sustainable Development", Paris, 2017

Keynote speaker at NetMob'17, "Mobile Data for Social Good: What's next", Milan, 2017

Keynote speaker at Data Summit, "Big Mobile Data for Social Good", Edinburgh, 2017

Keynote speaker at EPFL Applied Machine Learning Days, "Human Behavior Modeling from Mobile Data: Opportunities and Challenges", Lausanne, 2017

Keynote speaker at i-Know International Conference on Data-Driven Future, "Human Behavior Modeling from (Big) Data, Austria, 2016

Keynote speaker at the Chief Data Scientist Forum Europe, "Big Data for Social Good", London, 2016

Keynote speaker at Mobile Thinking Days, "Technology and Health", Barcelona, 2016

Keynote speaker in DPharm Europe: Disruptive Innovations for Clinical Trials, "The future of Mobile" London, 2016

Keynote speaker in DPharm: Disruptive Innovations for Clinical Trials, "The future of Mobile" Boston, 2015

Keynote speaker in BDigital Global Congress, "The future of the mobile phone" (2015), "Big Data for Social Good" (2013) Barcelona

Keynote speaker at Mobile Thinking Days, "The future of the mobile phone", Barcelona, 2015

Keynote panelist in GSMA Mobile World Congress, "Big Data for Social Good" session, Barcelona, 2015

Invited panelist at the Royal Statistical Society: "What is the future of official statistics in the big data era" London, 2014

Invited panelist in Data Renaissance: A New Era of Data Innovation within Responsible Business Week, London, 2014

Keynote speaker at WIRED London, "What Big Data and the Mexican Pandemic Taught Us" London, 2013

Keynote speaker at "La Caixa Foundation" Fellowship Award ceremony, in the presence of the King and Queen of Spain and other personalities, 2008

Keynote speaker at TTI/Vanguard NextGens Conference, "Wearable Physiological Monitoring" Seattle, 2006

Keynote panelist invited as an expert in various European Commission expert meetings

#### To the General Public

Regular speaker to teenagers in high schools and secondary schools

Keynote speaker at TMT Experience, "The Future of the Mobile Phone", Valencia, June 2017

Invited speaker at SUMA, "The Future of the Mobile Phone", Alicante, May 2017

Invited speaker at the Distinguished Semiars by the Spanish National Center for Cancer Research (CNIO), "The Future of the Mobile Phone", Madrid, Feb 2017

Keynote speaker at HP InnoTalent program, "A career in technological research", HP Labs, Sant Cugat del Valles, Barcelona, Spain, Feb 2017

Invited speaker at the Crazy about Science program by the Fundacio Catalunya la Pedrera, "A career in technological research", Mont Benet, Jan 2017

Invited speaker at Elisava School of Design, "The Future of the Mobile Phone", Barcelona, Jan 2017

Invited panelist at Women360 Congress on Female Leadership, ESADE, Sant Cugat del Valles, Spain Oct 2016

Invited speaker at 50 AEDIPE conference on the Future of Work, Pamplona, Spain Oct 2016

Invited speaker at Fundesem Summit 2016, "Big Data for Social Good" Alicante, Spain, Sept 2016

Invited speaker at Digital Technologies event by Generalitat of Catalunya Barcelona June 2016

Invited speaker by FEDA on The Future of the Mobile Phone. Oviedo. June 2016

Invited speaker at ThinkingParty 2016 -- "Technology and the Brain, an exciting pair" Madrid. June 2016

Keynote speaker at Whats Next STEM event organized by Microsoft Madrid. April 2016

Keynote speaker at the Center of Law Studies and Specialized Education of Catalunya "Modeling Human Behavior from Mobile Data" Barcelona. April 2016

Keynote panelist at Digital Society event. Auditorium of Alicante. Alicante. April 2016

Keynote speaker on "Technology and Emotions" at Fundacion Telefonica. Madrid. March 2016

Keynote speaker at the Science Museum of Valencia on "The Future of the Mobile Phone" Valencia March 2016

Keynote speaker at Tertulia Digital, "The future of the mobile phone", Barcelona, 2015

Keynote speaker at 5 Talks Barcelona, "How Big Data can help Fight Pandemics: From H1N1 to Ebola" Barcelona, 2015

Keynote speaker at UPC during Science Week. Talk followed live by a few hundred students and via streaming by 3300 high school students, "Small Devices for Big Impact" Barcelona, 2013

Speaker at TEDx Barcelona, "My cellphone, my partner" Barcelona, 2013

Speaker at TEDxRamblas, "The Invisible Army: Small Helpers for Big Problems" Barcelona, 2012