Curriculum Vitae   José A. López-Salcedo

Universitat Autònoma de Barcelona
Department of Telecommunications and Systems Engineering
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e-mail: jose.salcedo@uab.es
http://spcomnav.uab.es/~jsalcedo

EDUCATION

07/2002 – 03/2007	**PhD (cum laude) in Telecommunication Engineering**, Universitat Politècnica de Catalunya. Dissertation title: "Coherent and non-coherent ultra-wideband communications". Supervisor: Prof. Gregori Vázquez. Conducted research in signal processing for synchronization and detection of UWB random waveforms.
09/1996 – 09/2001	**MSc in Telecommunication Engineering**, ETSETB, Universitat Politècnica de Catalunya. Final thesis (cum laude) in the design and implementation of the on-board demodulation module of the Amerhis satellite payload.

ACADEMIC AND RESEARCH POSITIONS

09/2013 – Present	**Associate Professor, Universitat Autònoma de Barcelona.** Tenured position involving research, management and teaching (BSc, MSc, PhD).
08/2014 – 01/2015	**Scientific Research Officer, European Commission**, DG Joint Research Center (JRC), Ispra, Italy. Researcher at the Institute for the Protection and Security of the Citizen (IPSC), conducting research on the interference assessment of amateur TV emissions onto Galileo E6 receivers.
09/2006 – 09/2013	**Assistant Professor, Universitat Autònoma de Barcelona.** Tenure-track position involving research, teaching and management duties.
09/2001 – 09/2006	**Research Assistant, Universitat Politècnica de Catalunya**, Dept. of Signal Theory and Communications. Involved in 10+ research projects dealing with synchronization techniques for digital receivers, satellite communications and iterative decoding algorithms.
09/2000 – 09/2001	**DSP Engineer**, Alcatel Espacio S.A. Involved in the design and simulation of the demodulation module for the DVB-A9343 on-board processor.

ACADEMIC MANAGEMENT POSITIONS

07/2015 – Present	**Director of the Telecommunications Engineering Section, Universitat Autònoma de Barcelona.** Responsible for all academic matters including program planning, strategy, outreach, and economic management of Telecommunication engineering studies.
05/2011 – Present	**Coordinator of the BSc degree in Telecommunication Engineering Systems, Universitat Autònoma de Barcelona.** Responsible for curricular matters, teaching planning, advisement, quality assurance and supervision of the BSc degree.
05/2011 – 09/2016	**Coordinator of the Telecommunication Engineering degree, Universitat Autònoma de Barcelona.** Responsible for all academic matters of the (non-EHEA) 5-years degree on Telecommunication Engineering, and supervision of its discontinuation in 2016.
07/2007 – Present	**Coordinator of the Industrial Practice Program for Telecommunication Engineering students, Universitat Autònoma de Barcelona.** Responsible for administering, promoting and supervising industry exchange agreements with students according to the curricula of the Telecom Eng. studies.

VISITING APPOINTMENTS

04/2016 (1 week)   **Invited Lecturer, Chalmers University of Technology, Sweden**.
Lectured a course on LTE technology for joint communications and positioning.

12/2015 (1 week)   **Visiting Professor, Hanyang University, Seoul, Korea.**
Collaborated with Prof. Sunwoo Kim in the context of quickest detection theory.

2010 – 13 (10 months) **Visiting Professor, University of California Irvine, USA.**
Hosted by Prof. A. Lee Swindlehutst at the Henri Samueli School of Engineering. Conducted research in filter-bank multicarrier signals and synchronization techniques for joint communications and positioning. (June–July 2013, April–June 2012, Feb.–April 2011, Feb.–Mar. 2010).

07/2011 – 09/2011   **Visiting Professor, University of Illinois at Urbana-Champaign.**
Hosted by Prof. Venugopal V. Veeravalli at the Coordinated Science Laboratory (CSL). Conducted research in distributed signal detection in wireless sensor networks.

05/2007 (1 week)   **Visiting Scholar, University of Waterloo, Canada**
Participant at the IQC School on Quantum Information.

RESEARCH AREAS OF INTEREST

_ Statistical signal processing for communications and navigation.
_ Advanced digital signal processing techniques for Global Navigation Satellite System (GNSS) receivers.
_ Detection theory, with emphasis on quickest detection techniques.
_ Robust and adaptive parameter estimation techniques.
_ Digital communications.

RESEARCH EXPERIENCE AND FUNDING

Involved in 37 research projects with a total funding of ~ 3.4 M€.

Principal investigator (PI) and Co-PI in 15 research projects with total funding ~ 1.6 M€.

12/2016 – 06/2018   **European Space Agency**, "SW/HW tools for cloud, hybrid and 5G positioning", Contract no: 4000119070/16/NL/GLC. Partners: UAB. Budget: 350,000€. **(PI)**

05/2016 – 05/2017   **European Space Agency**, "HighOrbits – Techniques for GNSS navigation at high orbits (GEO/GTO/HEO)", Contract no: AO/1-8349/15/NL/LF. Partners: GMV (E), Airbus (D). UAB budget: 35,000€. **(PI)**

10/2015 – 06/2016   **European Space Agency**, CCN to the contract no. AO/1-6918/11/NL/AT "ROCAT – Techniques for robust carrier phase tracking under high dynamic, strong fading and scintillation conditions", Partners: GMVIS (P). UAB budget: 17,000€. **(PI)**

09/2015 – 04/2017   **European Space Agency**, "E-GNSS blind signal processing validation and performance methodology development", Contract no: ESTEC 4000115110/15/NL/LF. UAB budget: 186,000€. (PI: Gonzalo Seco)

04/2015 – 12/2015   **European Space Agency**, "Development of a cloud GNSS receiver", Contract no: ESTEC 4000113891/15/NL/HK. UAB budget: 25,000€. **(PI)**

01/2015 – 12/2018   **Spanish Ministry of Economy**, "GGPOS – Positioning in urban and adverse scenarios using GNSS and 5G systems", Contract no: TEC2014-53656-R. UAB budget: 134,552€. (PI: Gonzalo Seco)

09/2014 – 09/2015   **European Space Agency**, "HiSens – Techniques for high sensitivity receivers", Contract no: AO/1-7763/13/NL/AK. Partners: GMVIS (P), Ruag Space (A), Tecnalia (E). UAB budget: 63,000€. (PI: Gonzalo Seco)

09/2013 – 09/2014   **European Space Agency**, "ADAPT – Adaptive tracking techniques for navigation signals", Contract no: AO/1-7389/12/NL/AK. Partners: GMVIS (P), EPFL (CH). UAB budget: 70,000€. **(PI)**

09/2013 – 09/2014   **GMV Aerospace and Defence**, "NLOS positioning algorithm for cellular networks based on ToA & AoA measurements". Private contract. UAB budget: 6,000€. **(PI)**

11/2012 – 10/2013   **European Space Agency**, "MoonGNSS – Weak GNSS signal navigation on the Moon", Contract no: AO/1-7097/12/NL/AT. Partners: GMV (E). UAB budget: 67,500€. (PI: Gonzalo Seco)

07/2012 – 07/2014   **European Space Agency**, "ROCAT – Techniques for robust carrier phase tracking

under high dynamic, strong fading and scintillation conditions", Contract no: AO/1-6918/11/NL/AT. Partners: GMVIS (P). UAB budget: 69,160€. **(PI)**

06/2012 – 01/2014   **European Commission**, "iGNSSrx – Integrity GNSS receivers", Contract no: ENTR/129/PP/ENT/SP2/11/5502. Partners: GMV (E), NSL (UK), TRL (UK). UAB budget: 197,692€. (PI: Gonzalo Seco)

03/2012 – 03/2015   **Spanish Ministry of Economy**, "Desarrollo de técnicas anti-jamming y anti-spoofing para sistemas GNSS", Contract no: EIC-ESA-2001-0079. UAB budget: 130,000€. **(PI)**

10/2012 – 10/2013   **Balsells Foundation, University of California Irvine**, "Multicarrier signals for combined communications and positioning. Contribution to positioning in LTE", Partners: UCI (USA). Budget: 12,500$. **(CoPI** with A. Lee Swindlehurst**)**

01/2012 – 12/2014   **Spanish Ministry of Science and Innovation**, "SICCNALS – Signals for combined communication and navigation systems: theoretical bounds, design and implementation aspects", Contract no: TEC2011-28219. UAB budget: 53,845€. (PI: Gonzalo Seco)

10/2011 – 10/2012   **Balsells Foundation, University of California Irvine**, "Multicarrier signals for combined communications and positioning. Contribution to synchronization in LTE", Partners: UCI (USA). Budget: 40,000$. **(CoPI** with A. Lee Swindlehurst**)**

10/2010 – 10/2011   **Balsells Foundation, University of California Irvine**, "Multicarrier signals for combined communications and positioning. Design and implementations aspects", Partners: UCI (USA). Budget: 41,000$. (PI: Gonzalo Seco and A. Lee Swindlehurst)

05/2010 – 07/2010   **Indra Espacio**, "Technical support to the test phase of CCC algorithms in EGNOS NLLP ground stations". Private contract. UAB budget: 25,000€. **(PI)**

01/2010 – 06/2019   **GMV Aerospace and Defence**, "Tracking techniques for high-sensitivity GNSS receivers". Private contract. UAB budget: 6,000€. **(PI)**

10/2009 – 10/2010   **Balsells Foundation, University of California Irvine**, "Signal design for combined positioning and communication systems", Partners: UCI (USA). Budget: 34,989$. (PI: Gonzalo Seco and A. Lee Swindlehurst)

09/2009 – 09/2012   **Spanish Ministry of Science and Innovation**, "Infraestructura de investigación para la integración de GNSS con sistemas de comunicación", Contract no: UNAB08-4E-005. UAB budget: 149,000€. **(PI)**

05/2009 – 07/2009   **Indra Espacio**, "Design of CCC algorithms for EGNOS NLLP ground stations". Private contract. UAB budget: 34,800€. **(PI)**

01/2009 – 12/2013   **Generalitat de Catalunya**, "SGR Program – Emerging research group on signal processing for communications and navigation", Contract no: 2009-SGR-298. UAB budget: 41,600€. (PI: Gonzalo Seco)

01/2009 – 12/2011   **Spanish Ministry of Science and Innovation**, "LAWCOM – Design of location-aware physical and link layers in cooperative communication systems", Contract no: TEC2008-06305. UAB budget: 57,233€. (PI: Gonzalo Seco)

03/2008 – 02/2012   **Spanish Ministry of Science and Innovation**, "INTEGRA – Investigatión en tecnologías para la gestión de la migración". Partners: Telvent (E), Amper (E), Boeing (E), GMV (E), Integrasys (E), Isdefe (E), Aertec (E), Biometric (E), Ngaro (E), S21sez (E), SHS (E), Vaelsys (E). Private contract. UAB budget: 679,620€. **(Co-PI** with Gonzalo Seco**)**

09/2007 – 04/2009   **European Space Agency**, "DINGPOS – Signal processing techniques and demonstrator for indoor GNSS positioning", Contract no: AO/1-5328/06/NL/GLC. Partners: GMV (E), TAS (F), Skysoft (P), Nemerix (CH), ADI (UK), UPC (E). Budget: 79,986€. (PI: Gonzalo Seco)

05/2005 – 11/2007   **European Space Agency**, "Development of an adaptive DVB-RCS1 / DVB-RCS2 OBP system for meshed communications", Partners: TAS (F), SES/Astra (F), Universidad de Cantabria (E), Verisat (N), UPC (E). (PI: Meritxell Lamarca)

09/2004 – 03/2006   **Indra Espacio**, "Desarrollo modem frequency hopping (FH) para comunicaciones satélite", Private contract. (PI: Gregori Vázquez)

05/2004 – 06/2006   **Indra Espacio**, "Support to the ESA technical proposal for a spread spectrum in-orbit testing system", Private contract. (PI: Javier Villares)

12/2003 – 05/2004   **Indra Espacio**, "Estudio y desarrollo de algoritmos de procesado de señal en

sistemas de comunicaciones DS-CDMA para modulaciones M-PSK", Private contract. (PI: Gregori Vázquez)

09/2003 – 12/2003	**Alcatel Space**, "Preliminary study of the autotrack receiver", Private contract. (PI: Gregori Vázquez)
09/2002 – 12/2003	**Alcatel Espacio**, "Galileo-Sat", Private contract. (PI: Jaume Riba)
09/2002 – 04/2003	**Alcatel Espacio**, "Estudio de técnicas de TTC para transponders digitales", Private contract. (PI: Gregori Vázquez)
09/2001 – 08/2003	**European Commission**, "FITNESS – Fourth-generation intelligent transparent networks enhanced through space-time systems", Contract no: IST-2000-30116. Partners: Lucent (UK), NTUA (G), Motorola (F), Cosmote (G), Fractus (E), Agere (NL), UPC (E). (PI: Meritxell Lamarca)
01/2001 – 08/2003	**European Commission**, "IBIS – Integrated broadcast interaction system", Partners: Alcatel Espacio (E), Alcatel Space (F), Hispasat (E), Shiron (IL), Sistemas y Redes de Comunicaciones (E), UPC (E). (PI: Meritxell Lamarca)
01/2001 – 12/2004	**Spanish Ministry of Science and Innovation**, "TECNAV – Desarrollo de técnicas de procesado de señal y observables para la mejora de los sistemas de navegación por satélite", Contract no: TIC2001-2356-C02-01. (PI: Juan A. Fernández Rubio)
09/2000 – 12/2001	**Alcatel Espacio**, "DVB Forward – Estudio, diseño y validación de la arquitectura del demodulador del procesador de banda base (BBP) del equipo de difusion de video digital (DVB) del programa DOMINO2", Private contract. (PI: Jaume Riba)

FELLOWSHIPS, AWARDS AND HONORS

08/2016	Elevated to **Senior Member** of the Institute of Electrical and Electronics Engineers (IEEE).
04/2016	**Erasmus+ Fellowship** for a lecturing appointment at Chalmers University.
12/2014	**FI-DGR Research Fellowship** from Generalitat de Catalunya to fund the PhD thesis of Sergi Locubiche.
03/2013	**Accreditation of Research** awarded by the Catalan Agency for the Quality of the University System (AQU); required for an associate professorship.
03/2011	**BE-DGR Visiting Fellowship** from Generalitat de Catalunya for a research stay at the University of Illinois at Urbana-Champaign.
01/2010	**FI-DGR Research Fellowship** from Generalitat de Catalunya to fund the PhD thesis of Sadiq Ali.
09/2007	**Accreditation of Assistant Professor** awarded by the National Agency of Evaluation of Quality and Accreditation (ANECA); required for an assistant professorship.
11/2005	**Accreditation of Collaborator Professor** from the Catalan Agency for the Quality of the University System (AQU); required for a collaboration professorship.
05/2003	**IEEE Student Travel Grant** awarded by the IEEE Communications Society for the paper "Stochastic approach to square timing estimation with frequency uncertainty", presented at the 2003 IEEE ICC conference (acceptance rate 37%).
06/2002	**FI-DGR Research Fellowship** from Generalitat de Catalunya to pursue the PhD (declined).
01/2002	**FPI Research Fellowship** from the Spanish Ministry of Science and Innovation to pursue the PhD.
09/2000	**Research Scholarship** from Alcatel Espacio S.A. to carry out the M.Sc. thesis.

SUPERVISION
PostDoc

10/2012 – 10/2013	**Kalman filter-based tracking techniques for GNSS receivers**, Jordi Vilà-Valls.

PhD

02/2017 – Present	**Cloud GNSS signal processing for IoT positioning applications**, Vicente Lucas-Sabola.

02/2015 – Present	**Advanced signal processing techniques for next-generation GNSS receivers**, Sergi Locubiche.
02/2013 – 02/2017	**Quickest detection techniques for GNSS signal-level integrity**, Daniel Egea (co-supervised with Prof. Gonzalo Seco-Granados).
03/2012 – 03/2015	**Anti-spoofing techniques in single-antenna GNSS receivers**, Juan Manuel Parro (discontinued; now at ESA).
10/2010 – 05/2014	**Evaluation of the LTE positioning capabilities**, José A. Del Peral Rosado (co-supervised with Prof. Gonzalo Seco-Granados).
01/2009 – 03/2014	**Distributed detection in WSN**, Sadiq Ali (co-supervised w/ Prof. Gonzalo Seco).

MSc

07/2017	**Study of SC-FDMA for uplink positioning in V2X**, María Angélica Barreto, UAB.
09/2015	**Adaptive tracking techniques for GNSS receivers**, Sergi Locubiche, UAB.
09/2014	**Open-loop synchronization for GNSS receivers**, Xavier Moré, UAB.
09/2013	**Interference detection for GNSS signal-level integrity**, Daniel Egea, UAB.
09/2012	**Study of spoofing threats on GNSS receivers**, Juan Manuel Parro, UAB.
09/2010	**Kalman filter-based tracking for high-sensitivity GNSS receivers**, José A. Del Peral Rosado, UAB.
05/2010	**Management system for UAV teams**, Esteban Gutiérrez, EETAC, UPC.
09/2008	**Synchronization techniques for OFDM**, Marc Alsinella Fernández, UAB.
01/2005	**Acquisition and tracking using an 8 antenna GPS receiver**, Miguel Mañas Barros, ETSETB, UPC.

BSc

07/2016	**Galileo in-orbit testing**, Antonio Tripiana, UAB.
07/2015	**Development of a cloud GNSS receiver**, Vicente Lucas, UAB.
09/2012	**Interference detection in GNSS**, David Manzano, UAB.
09/2012	**Timing synchronization in LTE**, David Gómez, UAB.
09/2011	**Nonlinear GNSS signal detection**, Pau Buch, UAB.
07/2011	**Signal detection based on extreme value theory**, Gabriel Casado, UAB.
09/2009	**Signal processing techniques for eolic map generation**, Carme Martínez, UAB.
06/2009	**Web representation of positioning data**, Ana Sierra, UAB.
06/2009	**Experimentation with a software GNSS receiver in harsh environments**, Juan Manuel Parro, UAB.
02/2009	**Noncoherent correlations in GNSS receivers**, Alejandro Girbes, UAB.
02/2008	**Software demodulator for digital receivers in railroad environments**, Alfonso Escoda and Jonathan Gabaldón, UAB.
02/2008	**Cooperative synchronization in sensor networks**, Diego Gálvez, UAB.
09/2007	**Positioning and handover techniques for DVB-H**, Xavier Saura, UAB.
09/2007	**Single-bit digital receivers for UWB systems**, Lluís Garcia, UAB.

TEACHING

MSc in Telecommunication Engineering

2009 – Present	**Statistical signal processing,** Fall, MSc in Telecommunication Engineering, UAB.
2009 – 2011	**Space systems engineering,** Fall, MSc in Design of Telecom. Systems, UAB.
2009 – 2012	**Large scale networks: bio-inspired and distributed techniques,** Fall, MSc in Design of Telecommunication Systems, UAB.

MSc in Aerospace Science and Technology

2007 – 2009	**Satellite communication principles,** Spring, MSc in Aerospace Science and Technology, EETAC, UPC.

BSc in Telecommunication Systems

2014 – Present	**Digital signal processing,** 3rd year course, Fall, BSc Telecommunication Engineering, UAB.

Telecommunication engineering (non-EHEA degree)

2007 – 2013   **Digital signal processing,** 4th year course, Fall semester, UAB.
2007 – 2014   **Design of advanced digital receivers,** 5th year course, Spring semester, UAB.
2006 – 2008   **Satellite communications and navigation,** 5th year course, Fall semester, UAB.
2005 – 2007   **Wireless communications,** 5th year course, Fall semester, UAB.
2006 – 2013   **Analog communications,** 2nd year course, Fall semester, UAB.
2006 – 2010   **Digital communications,** 2nd year course, Spring semester, UAB.
2004 – 2005   **Communications I,** 3nd year course, Spring semester, ETSETB, UPC.

PhD EVALUATION COMMITTEES

04/2017   René Játiva, "Dispersive source models in wireless communications subscriber location", UPC. (Substitute panel member)

03/2017   Juan Manuel Castro Arvizu, "Robust indoor positioning in WLAN networks", UPC. (Substitute panel member)

01/2016   Francisco Ramírez, "Graph-based techniques for compression and reconstruction of sparse sources", UPC. (Substitute panel member)

01/2016   Adrià Rovira, "Consolidation and assessment of a technique to provide Fast and Precise Point Positioning (Fast-PPP)", UPC. (Substitute panel member)

04/2015   Baharak Soltanian, "Signal processing algorithms for FFT-based GNSS receivers", Tampere University of Technology. (Reviewer of PhD proposal)

07/2014   Josep Font-Segura, "Wideband cognitive radio: monitoring, detection and sparse noise subspace communication", UPC. (Substitute panel member)

10/2012   Joan Enric Barceló, "Communications in Wireless Sensor Networks: Compression, Energy Efficiency and Security", UAB. (Substitute panel member)

09/2011   Ingmar Groh, "Efficient time-variant synchronization in spread-spectrum navigation receivers", Universidad Miguel Hernández. (Panel member)

06/2009   Pau Closas, "Bayesian signal processing techniques for GNSS receivers: from multipath mitigation to positioning", UPC. (Substitute panel member)

09/2008   Antoni Morell, "A convex decomposition perspective on dynamic bandwidth allocation and applications", UPC. (Substitute panel member).

04/2008   Ali Nassar, "Time-varying frequency selective MIMO channel estimation", UPC. (Panel member)

INVITED TALKS

T9. (Korea)   "Research activities on GNSS signal processing", ETRI, 11/12/2015.

T8. (Korea)   "Quickest detection for signal-level integrity", Hanyang University, 08/12/2015.

T7. (Finland)   "Interference issues in GNSS", Doctoral program in Information Science and Engineering, GETA/TISE Summer School, 27/08/2013.

T6. (Finland)   "LTE positioning principles – advanced topics", Doctoral program in Information Science and Engineering, GETA/TISE Summer School, 28/08/2013.

T5. (Finland)   "LTE positioning principles – basics", Doctoral program in Information Science and Engineering, GETA/TISE Summer School, 28/08/2013.

T4. (Spain)   "Overview of error sources in harsh environments and alternative positioning methods", ESA course on Propagation effects, channel models and related errors on GNSS, ESAC, Madrid, 16/10/2012.

T3. (USA)   "A premier on synchronization for digital receivers", Coordinated Science Laboratory (CSL), University of Illinois at Urbana-Champaign, 27/07/2011.

T2. (USA)   "Maximum likelihood synchronization techniques for single- and multi-carrier communications", EECS Department, University of California Irvine, 02/03/2010.

T1. (Spain)   "Tecnologías para la vigilancia, monitorización y alerta", Workshop del Instituto de Navegación de España, Institut Cartogràfic de Catalunya (ICC), 22/05/2009.

PROFESSIONAL ACTIVITIES

General co-chair

| 2016 | Intl. Conference on Localization and GNSS (ICL-GNSS), Barcelona, Spain. |

Publications chair

| 2015 | Intl. Conference on Localization and GNSS (ICL-GNSS), Göteborg, Sweden. |

Technical Program Committee (TPC) co-chair

| 2014 | Intl. Conference on Localization and GNSS (ICL-GNSS), Helsinki, Finland. |

Technical Program Committee (TPC) member

2015	IEEE Globecom, Track on signal processing for communications, San Diego, USA.
2015	European Signal Processing Conference (EUSIPCO), Nice, France.
2015	IEEE International Conference on Communications (ICC), London, UK.
2015	Intl. Symp. on Wireless Communication Systems (ISWCS), Brussels, Belgium.
2015	Intl. Symp. on Wireless Communication Systems (ISWCS), Brussels, Belgium.
2011	European Signal Processing Conference (EUSIPCO), Barcelona, Spain.
2009	IEEE Vehicular Technology Conference (VTC), Barcelona, Spain.

Reviewer for Journals

_ EURASIP Signal Processing Journal
_ IEEE Transactions on Communications
_ IEEE Transactions on Signal Processing
_ IEEE Transactions on Wireless Communications
_ IEEE Transactions on Vehicular Technology
_ IEEE Transactions on Circuits and Systems I
_ IEEE Transactions on Information Theory
_ IEEE Communications Letters
_ IEEE Signal Processing Letters
_ IEE Proceedings on Science, Measurement and Technology
_ International Journal of Navigation and Observation
_ Hindawi Journal on Advances in Electrical Engineering
_ Hindawi Advances in Electrical Engineering
_ MDPI Sensors
_ Signal Processing (Elsevier)
_ Springer Journal of Zheijang University Science C (Computers & Electronics)
_ Transactions on Emerging Technologies (Wiley)

Reviewer for Conferences

_ European Signal Processing Conference (EUSIPCO)
_ IEEE Consumer Communications and Networking Conference (CCNC)
_ IEEE GlobeCom
_ IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)
_ IEEE International Conference on Communication Systems (ICCS)
_ IEEE International Conference on Ultrawideband (ICUWB)
_ IEEE Sensor Array Multichannel Signal Processing Workshop (SAM)
_ IEEE Vehicular Technology Conference (VTC)
_ IEEE Wireless Communications and Networking Conference (WCNC)
_ International Conference on Localization and GNSS (ICL-GNSS)
_ International Workshop on Satellite and Space Communications (IWSSC)

Evaluator of Project Proposals

_ Spanish Ministry of Economy, ANEP – Agencia Nacional de Evaluación y Prospectiva (Call 2014).
_ Xunta de Galicia, Department of Innovation and Industry, General research program (Call 2007, 2010).

Membership

_ Member of the Institute of Electrical and Electronics Engineers since 1997.
_ Member of the IEEE Aerospace and Electronic Systems Society.
_ Member of the IEEE Communications Society.

_ Member of the IEEE Signal Processing Society.

_ Member of the Spanish Association of Telecommunication Engineers (COIT/AEIT).

Volunteering

_ Secretary of the Barcelona IEEE Student Branch (06/1998 – 08/2000).

_ Member of the Editorial Board of the IEEE Buran journal (06/1998 – 08/2000).

PUBLICATIONS

Peer-reviewed Journals

J21. D. Egea, G. Seco-Granados, **J. A. López-Salcedo**, "Comprehensive Overview of Quickest Detection Theory and its Application to GNSS Threat Detection", Gyroscopy and Navigation, vol. 8, no. 1, pp. 1-14, January 2017.

J20. N. Ferrara, M. Pasnikowski, S. Sanchez-Naranjo, F. Gonzalez, R. Ramos-Pollan, G. Seco-Granados, **J. A. López-Salcedo**, D. Egea-Roca, M. Sole, M. Toledo, E. Lohan, "Combined Architecture Enhancing Multi-Dimensional Signal Quality in GNSS Receivers", Inside GNSS, April/May, pp. 54-62, Apr 01 2016.

J19. J. Vilà-Valls, P. Closas, C. Fernández, **J. A. López-Salcedo**, G. Seco-Granados, "Adaptive GNSS carrier tracking under ionospheric scintillation: estimation vs mitigation", IEEE Communications Letters, vol. 19, no. 6, pp. 961-964, Jun 2015 (Q2, IF 1.29).

J18. F. Jiang, J. Chen, A. L. Swindlehurst, **J. A. López-Salcedo**, "Massive MIMO for Wireless Sensing with a Coherent Multiple Access Channel", IEEE Transactions on Signal Processing, vol. 63, no. 12, pp. 3005-3017, Jun 2015 (Q1, IF 2.62).

J17. A. Gasull, **J. A. López-Salcedo**, F. Utzet, "Maxima of Gamma Random Variables and Other Weibull-Like Distributions and the Lambert W Function", Test, vol. 24, no. 4, pp. 714-733, Mar 01 2015 (Q2, IF 1.207).

J16. S. Ali, M. Jansson, G. Seco-Granados, J. A. López-Salcedo, "Kronecker-based Fusion Rule for Cooperative Spectrum Sensing with Multi-Antenna Receivers", Electronics, vol 3(4), pp. 675-688, Dec 10 2014.

J15. S. Ali, D. Ramirez, M. Jansson, G. Seco-Granados, **J. A. López-Salcedo**, "Multi-antenna Spectrum Sensing by Exploiting Spatio-temporal Correlation", EURASIP Journal on Advances in Signal Processing, Oct 25 2014 (Q3, IF 0.77).

J14. E. Gutiérrez, **J. A. López-Salcedo**, G. Seco-Granados, "Systematic Design of Transmitter and Receiver Architectures for Flexible Filter Bank Multi-Carrier Signals", EURASIP Journal on Advances in Signal Processing, vol. 103, pp. 1-26, Jul 2014 (Q3, IF 0.77).

J13. E. S. Lohan, J. Lunden, G. Seco-Granados, **J. A. López-Salcedo**, V. Koivunen, "Cyclic Frequencies of GNSS Signals and their Potential within a Cognitive Positioning Framework", ION Navigation Journal, vol. 61, Issue 2, pp. 95-114, Jun 2014.

J12. J. A. Del Peral-Rosado, **J. A. López-Salcedo**, G. Seco-Granados, F. Zanier, M. Crisci, "Joint Maximum Likelihood Time-Delay Estimation for LTE Positioning in Multipath Channels", EURASIP Journal on Advances in Signal Processing, vol. 2014:33, 13 pages, Feb 28 2014 (Q3, IF 0.77).

J11. J. A. López-Salcedo, J. A. Del Peral-Rosado, G. Seco-Granados, "Survey on Robust Carrier Tracking Techniques", IEEE Communications Surveys and Tutorials (top #1 journal in the category of "Telecommunications"), vol. 16, no. 2, pp. 670-688, second quarter 2014 (Q1, IF 6.80).

J10. S. Ali, G. Seco-Granados, **J. A. López-Salcedo**, "Spectrum Sensing with Spatial Signatures in the Presence of Noise Uncertainty and Shadowing", EURASIP Journal on Wireless Communications and Networking, vol. 2013:150, pp. 1-16, 2013 (Q3, IF 0.80).

J9. J. A. López-Salcedo, E. Gutiérrez, G. Seco-Granados, A. L. Swindlehurst, "Unified Framework for the Synchronization of Flexible Multicarrier Communication Signals", IEEE Trans. on Signal Processing, vol. 61, no. 4, pp. 828-842, Feb 2013 (Q1, IF 3.19).

J8. G. Seco-Granados, **J. A. López-Salcedo**, D. Jiménez-Baños, G. López-Risueño, "Challenges in Indoor Global Navigation Satellite Systems", IEEE Signal Processing Magazine (top #1 journal in the field of "Signal Processing"), vol. 29, no. 2, pp. 108-131, Mar 2012 (Q1, IF 3.36).

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