

PERSONAL INFORMATION

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Sex Male | Date of birth 02/11/1979 | Nationality Portuguese

PERSONAL STATEMENT

During my professional career, applied research has been constantly aligned with teaching and mentoring at the academic level. With motivations driven from the domain of industrial information systems, I have developed specific skills in the topics of Middleware, Enterprise Interoperability, Integration of Complex Systems and Components, as well as Model-Driven Development.

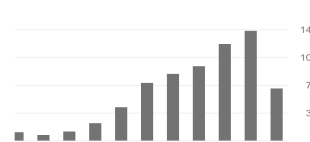
Pursuing to improve the capacity that two or more enterprises, and their systems, have to cooperate over a period of time towards a common objective, research in systems interoperability is being addressed across several areas, such as, data, processes, and objects. It complements the disciplines of enterprise architecture, and systems engineering, addressing modelling, monitoring, or decision-making methodologies while providing the tools necessary to integrate new and legacy systems to both inter and intra-enterprise needs, and facilitating cooperation in large value added networks.

Research & Development approach: As detailed in the following sections I participate actively, leading multidisciplinary teams and taking individual development at technical and scientific level in several research projects funded by the European Commission. I am author of more than 90 scientific publications that, since 2012, have been cited more than 580 times (according to Google Scholar statistics – graphic bellow), h-index=12. The most relevant publications include a journal article acknowledged by Thomson Reuters® as a highly cited paper in 2016, and best paper award at the IEEE Intelligent Systems Conference in 2016. I have also enlarged experience in modelling and standardization, collaborating with organizations such as the International Standardization Organization (ISO) or the Object Management Group (OMG). In 2006, I was part of the SMART-fm project team, receiving the Intelligent Manufacturing Systems (IMS) award for the remarkable contribution to interoperability in the furniture industry, especially to SMEs.

Cited by

	All	Since 2012
Citations	679	581
h-index	14	12
i10-index	18	16

Citations per year



Teaching approach: Since 2004, the collaboration with the Faculty of Science and Technology (FCT) from the NOVA University of Lisbon (UNL) has been frequent, lecturing “Microprocessors Programming”, “Algorithms and Data Structures”, “Architectures for Integration of Systems”, until the most recent engagement in “Soft Skills for Science and Technology”, a fundamental course to prepare young engineers to the market. Currently I am invited auxiliary professor (gratuitously) at the Electrical Engineering Department, co-supervising one PhD work as well as a number of MSc.

WORK EXPERIENCE

2001 - Nowadays

Senior Researcher

UNINOVA – Instituto de Desenvolvimento de Novas Tecnologias

Current position: Research Area Coordinator at CTS/GRIS (Group for Research in Interoperability of Systems)

Main skills addressed: Research Project Mgmt; Internet of Things; Sustainable Interoperability; Industrial Systems Interoperability; Information and Knowledge Modelling; Model-driven Development and Transformations; Model-based Services Engineering; Standardization.

Progress in the Institution:

- 2001 – 2003: Junior researcher and developer (part-time) - Web development, MS Access
- 2005 – 2012: Research assistant and PhD Student - Enterprise Systems Interoperability; Data Modelling; Model-driven Development and Transformations; Standardization
- 2012 – Nowadays: Senior Researcher

Relevant Activities:

- Chair of Interop-Vlab TF “Model Driven Interoperability, Engineering and Simulation”(goo.gl/GkBnpV)
- Member of the Scientific Committee of several international events and publications (see detail in the section for personal skills and additional information).
- Reviewer of the European Commission’s Roadmap for the research in the areas of Future Internet Enterprise System “FInES Research Roadmap 2025 - v2.0”. 2012
- Contribution to the following European research projects:
 - Ongoing (2)
 - **C2NET** “Cloud Collaborative Manufacturing Networks” (H2020 FoF - 636909); Beginning: January 2015
 - Member of the project’s executive board and local coordinator of UNINOVA’s activities;
 - Project Lead of work package 3 for the continuous data collection framework specification and implementation;
 - Industrial scenarios specification and technical knowledge base definition to support the project’s platform.
 - **BigDataOcean** “Exploiting Ocean’s of Data for Maritime Applications” (H2020 ICT- 732310); Beginning: January 2017
 - Local coordinator of UNINOVA’s activities;
 - Project Lead of work package 2 for stakeholders identification, requirements engineering, and project methodology;
 - Support the Wave Power pilot.

The complete list of projects is included in the section for personal skills and additional information

- Participation on the following international **standardization** initiatives:
 - **ISO 10303-236** - “Industrial automation systems and integration — Product data representation and exchange — Application protocol: Furniture catalog and interior design”;
 - **OMG formal/2010-10-01** – “Reference Metamodel for the EXPRESS Information Modeling Language Specification”.
- Supervisor of the following research thesis (10):
 - **(ongoing)**: Co-supervisor of **PhD** thesis of José Alexandre Pires Ferreira. *Monitoring Morphisms to support Sustainable Interoperability of Networked Enterprise Systems*. PDEEC/FCT-UNL;
 - **(ongoing)**: Co-supervisor of **MSc** thesis of Fábio Adriano Seixas Lopes. *Intelligent IoT and Dynamic Network Semantic Maps for more Trustworthy Systems*. DEE/FCT-UNL;
 - **2017**: Co-supervisor of **MSc** thesis of João Nuno Fernandes Pedro Soares. *Management of devices to support interoperability in a network*. DEE/FCT-UNL
 - **2016**: Co-supervisor of **MSc** thesis of Nuno Manuel Couto Barreira. *Sistema Inteligente para Otimização de Rotas*. DEE/FCT-UNL;
 - **2016**: Co-supervisor of **MSc** thesis of Cristiano José Chainho Pereira. *Otimização de espaços físicos suportada por IoT*. DEE/FCT-UNL;
 - **2015**: Co-supervisor of **MSc** thesis of Carlos Pedro Carvalho Raposo. *Methodological Framework for Detection of Harmonization Breaking in Service Environments*. DEE/FCT-UNL;
 - **2013**: Co-supervisor of **MSc** thesis of Bruno Paulo da Silva Neves Caixinha. *Methodology for Enterprise Interoperability Assessment*. DEE/FCT-UNL;
 - **2012**: Co-supervisor of **MSc** thesis of José Alexandre Pires Ferreira. *Monitoring Morphisms to Support Sustainable Interoperability of Enterprise Systems*. DEE/FCT-UNL.
 - **2010**: Co-supervisor of **MSc** thesis of Miguel Alexandre de Sousa Ferro de Beça. *Tuple-based Morphisms for Interoperability Establishment of Financial Information Models*. DEE/FCT-UNL
 - **2005**: Co-supervisor **undergraduate** thesis of Pedro Filipe Matias de Castro. *Mapear XML Schema em base de dados relacional (XSD2RDB)*. DI/FCT/UNL.

Business or sector: Research and Technology Transfer

2003 – Nowadays

Invited Auxiliar Professor

Faculdade de Ciências e Tecnologia da Universidade NOVA de Lisboa (FCT-UNL)

Position: Auxiliar Professor and Research Projects Senior Contributor

Main skills addressed: Soft Skills, Internet of Things ; Sustainable Interoperability; Industrial Systems Interoperability; Model-based Services Engineering; Algorithms.

Progress in the Institution:

- 2004 – 2005: Teaching Fellow in the Department of Informatics (DI)
- 2005 – 2006: Teaching Fellow, Research Assistant in the Department of Electrical Engineering (DEE)
- 2007 – 2013: Periodic collaborations for lectures at DEE
- 2013 – 2014: Post-Doctoral Research Fellow at DEE
- 2015 – Nowadays: Invited Auxiliar Professor at DEE

Relevant Activities:

- Member of the jury of the following PhD thesis (1):
 - **2016:** PhD thesis of Catarina Inês Marques de Lucena. *Framework for collaborative knowledge management in organizations*. DEE/FCT-UNL;
- Teaching at the Department of Electrical Engineering (DEE):
 - **Soft Skills for Science and Technology** (2015/2016; 2016/2017)
 - **Architectures for Integration of Systems** (2013/2014)
 - **Microprocessors Programming** (2006/2007)
 - **Logical Systems 2** (2006/2007)
- Teaching at the Department of Informatics (DI):
 - **Introduction to Programming** (2004/2005 and 2005/2006)
 - **Algorithms and Data Structures** (2004/2005)
- Invited Lectures
 - Invited **speaker at Unit 14.c “Project Proposal Preparation Examples – NMP”** of the module “Scientific Research Methodologies and Techniques”, part of the Doctoral Programme of Electrical and Computers Engineering (2012/2013)
 - Invited **speaker at “Model-driven Interoperability”** module of the Architectures for Integration of Systems MSc curricular unit (from 2009/2010 to 2012/2013)
- Contribution to National and International research projects, namely the PRODUTECH-PSI (QREN – 13849) and the SMART-fm (FP5 IST-2001-52224), as included in the section for personal skills and additional information.

Business or sector: Research and Academia

EDUCATION AND TRAINING

2013-2014	<p>Post-Doctoral Research</p> <p>Faculty of Sciences and Technology of Universidade NOVA de Lisboa (FCT-UNL)</p> <p>GRIS Lab of the Center for Technology and Systems (CTS)</p> <ul style="list-style-type: none"> ▫ Model-based Services Engineering 	Level 8
2008-2012	<p>PhD in Electrical and Computers Engineering (Industrial Information Systems branch)</p> <p>Faculty of Sciences and Technology of Universidade NOVA de Lisboa (FCT-UNL)</p> <ul style="list-style-type: none"> ▫ Self-Sustainable Interoperability, Meta-modelling, Model Transformations 	Level 8
2003-2006	<p>Master of Science (MSc) in Informatics</p> <p>Faculty of Sciences and Technology of Universidade NOVA de Lisboa (FCT-UNL)</p> <ul style="list-style-type: none"> ▫ Information Systems Interoperability, Product Data Standards and Model Transformations 	Level 7
1997-2003	<p>Computer Science Engineering Degree</p> <p>Faculty of Sciences and Technology of Universidade NOVA de Lisboa (FCT-UNL)</p> <ul style="list-style-type: none"> ▫ Data Bases and Software Engineering 	Level 6
2003	<p>Professional Trainer</p> <p>NaturInvest Institute (Accredited by Portugal’s I.E.F.P)</p>	

PERSONAL SKILLS

Mother tongue	Portuguese				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C	C	C	C	C
	First Certificate of English by the University of Cambridge				
Spanish	B	B	B	B	A
	-				

Levels: A1/2: Basic User - B1/2 Independent User - C1/2: Advanced User

Communication skills

Good capability of communication and cooperation:

- Debate and discussion, throughout multiple working meetings and many years of professional experience promoting teamwork and cooperation in international projects;
- Oratory, demonstrated through several presentations in conferences, and experience acquired both at academic and professional training environments:
 - 2016:** C2NET – A Networked Operations Planning solution for the Industry. **Invited Speaker and Panelist** at 1st CREMAC2NET Industrial Workshop - Collaboration in the Cloud. 24th Nov 2016, San Sebastian, Spain;
 - 2015:** **Invited Speaker** at the *Industrial Seminar “A Fábrica do Futuro”* organized by PT Inovação and Ordem dos Engenheiros. 16th September 2015, Aveiro, Portugal;
 - 2014:** MSEE Toolbox for Manufacturing Services Modelling. **Invited Speaker** at *Industrial Workshop on Manufacturing Service Ecosystem (MSEE)*. 8th July, 2014, Guimarães, Portugal;
 - 2014:** OSMOSE and the Sensing Liquid Enterprise. **Invited Speaker** at the *FITMAN workshop in the IOT Week 2014*. 18th June, 2014, London, UK;
 - 2014:** OSMOSE and the Sensing Liquid Enterprise. **Invited Speaker** at *DBI (Digital Business Innovation) workshop in the Future Internet Assembly (FIA) 2014*. 23rd March, 2014, Athens, Greece;
 - 2011:** Interoperability and the software, services and semantic technologies challenges in the future of internet. **Invited Speaker** at *WoSS- 2nd Workshop on Software Services: Cloud Computing and Applications based on Software Services*. 6-9 June, 2011, Timisoara, Romania;
 - 2009:** Implementation Techniques and Frameworks. **Trainer** at *SISTER/S3T: Enterprise Interoperability Seminar*. 27 October, 2009, University of Sofia St.Kliment Ohridski, Sofia, Bulgaria;
 - 2009:** Enterprise Interoperability. **Trainer** at the seminar from the *Greek Interoperability Center (GIC)*. 2-24 July, 2009, National Technical University of Athens (NTUA), Athens, Greece;
 - 2008:** FUNSTEP tools and services. **Invited Speaker** at *CEN/ISSS FG CDC / eCAT-ePPS Workshop on information standards and dictionaries*. 20-21 November, 2008, Brussels, Belgium;
 - 2008:** funStep training. **Trainer** at the seminar *Data Sharing in the Furniture Industry*. 16 October, 2008, FIRA Offices, Stevenage, UK.

Organisational / managerial skills

Good leadership capability:

- Since 2014: **Chair** of Interop-Vlab (Int. Virtual Laboratory for Enterprise Interoperability) **Task Force “Model Driven Interoperability, Engineering and Simulation”** (<http://interop-vlab.eu/ft2-model-driven-interoperability-engineering-and-simulation/>);
- Coordination and leadership of task involving international multidisciplinary teams;
- Co-supervision of 10 research thesis (2 of which still on-going);
- Participation in several events’ organizing committees and initiatives, including:
 - **2017:** Member of **International Organizing Committee** - *23rd ICE/IEEE-ITCM conference*. June, Funchal, PT
 - **2017:** **Special Session Chair** for the “Industrial Applications: Theory and Practice” and for the “Big Data Applications & Future Trends” sessions in the 23rd ICE-ITCM conference (www.ice-conference.org/Home/Special-Sessions.aspx)
 - **2017:** **Special Session Chair** for the “Model Driven and Simulation Engineering for the Future Enterprise” session in the Mod4Sim conference (<http://www.sel.uniroma2.it/mod4sim17/sessions/sessions.htm>)
 - **2015 - 2016:** **Chair** of *Special Session MDSE4SI “Model-Driven Enterprise Services and Applications for a Sustainable Interoperability: New Paradigms for Development in the Future Enterprise”* organized in MODELWARD conference (<http://www.modelsward.org/MDSE4SI.aspx?y=2016>)
 - **2016:** **Workshop chair** of the “Sensing Enterprise: Opportunities and Barriers” in I-ESA 2016 conference
 - **2015:** **Symposium co-organizer** for the “Systems Engineering” SEIKM session in the ASME IDETC/CIE conference (<http://www.asmeconferences.org/IDETC2015/>)
 - **2014:** **Chair** of *Special Session MDSE 2014 “Model-Driven Service Engineering: New Paradigms for Services Development in the Manufacturing Domain”* in MODELWARD conference ([modelsward.org/MDSE.aspx?y=2014](http://www.modelsward.org/MDSE.aspx?y=2014))
 - **2010 – 2013:** **UNITE secondment chair** (www.unite-europe.eu/)
 - **2011:** **Mobility Program Chair** for the 1st *UNITE Doctoral Symposium “Future Internet-based Enterprise Systems”*. June, University Politehnica of Bucharest, Romania (unitedoc.netii.net)
 - **2011:** **Co-Chair** for the workshop “Opportunities for Future Internet Research in the Enlarged Europe”. May, Technical University of Riga, Latvia (www.itl.rtu.lv/mik/?id=344)
 - **2010:** Member of the **Organizing Committee** of *DoCEIS’10– 1st Doctoral Conference on Computing, Electrical and Industrial Systems*. February, Caparica, Portugal (www.uninova.pt/doceis)
 - **2008:** Member of the **Organizing Committee** of *ICE08– 14th International ICE-Conference on Engineering, Technology and Innovation*. June, Caparica, Portugal (www.ice-conference.org)
 - **2007:** Member of the **Organizing Committee** of *I-ESA’07– 3rd International Conference on Interoperability for Enterprise Software and Applications*. March, Funchal, Portugal
 - **2007:** **Co-Chair** for the workshop “Enabling Model-Driven Architecture: Model Transformation, Derivation and Extension” in the I-ESA’07 Conference. March, Funchal, Portugal
 - **2005:** Member of the **Organizing Committee** of the *Seminar “Information Technologies in the Furniture Industry – A Vector of Innovation”* – Expo Salão, Batalha, Portugal.
 - **2003:** Member of the **Organizing Committee** of *CE2003 – 10th ISPE International Conference on Concurrent Engineering: Research and Applications*. June, Funchal, Portugal

Other skills and Positions 2001/2001: President of the Fiscal Council from the Students Association of FCT-UNL
 2001: Members of the Representatives Assembly of UNL
 2001 – 2002: Member of the Representatives Assembly of FCT-UNL

Drivers Licence Category B

ADDITIONAL INFORMATION

- Honours and awards**
- 2016: Best Paper Award for the paper “An architecture to support responsive production in manufacturing environments”, IEEE International Conference on Intelligent Systems 2016
 - 2006: Scientific Excellent Prize in the Smart-fm project, Intelligent Manufacturing Systems (www.ims.org), USA/European Union/Japan/Australia/Canada/Switzerland
- Membership of Technical Committees**
- Since 2011: Member of **Task Force “Model Driven Interoperability, Engineering and Simulation”**, of Interop Vlab network - International Virtual Laboratory for Enterprise Interoperability (<http://interop-vlab.eu>)
 - 2009-2015: Member of **Task Force “EI Practice and Reference Applications”**, of Interop Vlab network - International Virtual Laboratory for Enterprise Interoperability (<http://interop-vlab.eu>)
- Membership of Scientific Committees (Journals)**
- Since 2015 : Member of scientific board of CEAI - *Journal of Control Engineering and Applied Informatics*. ISSN: 1454-8658
 - Since 2014: Regular **Reviewer** of *JCIM- International Journal on Computer Integrated Manufacturing*. ISSN: 0951-192X
 - 2014: Member of the Scientific Committee of the *JIM – Journal of Intelligent Manufacturing, special issue on: Novel Strategies for Global Manufacturing Systems Interoperability*. ISSN: 0956-5515
 - Since 2013: Regular **Reviewer** of *JIM - Journal of Intelligent Manufacturing*. ISSN: 0956-5515
- Membership of Scientific Committees (Events)**
- 2017: Member of the **International Organizing Committee** of 23rd ICE/IEEE International Technology Management Conference (<http://www.ice-conference.org/>).
 - 2017: Member of the **Program Committee** of Mod4Sim conference - International Symposium on Model-driven Approaches for Simulation Engineering (<http://www.sel.uniroma2.it/mod4sim17/>).
 - Since 2014: Member of the **International Programme Committee (IPC)** of ICIST - International Conference on Information Society and Technology (<http://www.yuinfo.org/icist2017/>)
 - 2016: Member of the **International Senior Program Committee** of I-ESA conference – Interoperability for Enterprise Systems and Applications.
 - 2010, 2014: Member of the **International Program Committee (IPC)** of CE conference - ISPE International Conference on Concurrent Engineering. (<http://www.ispe-org.net/conferences/>)
 - 2014: Member of the **Scientific Committee** for the invited session on Knowledge Integration organized in IEEE IS'14 Conf.
 - 2011: Member of the **Scientific Committee** for the Samos Summit 2011 - Future Internet: The power to change society. July, Samos, Greece (samos-summit.blogspot.com)
- Publications (Journals)**
- 2017: Marques, M., Agostinho, C., Zacharewicz, G., & Jardim-Gonçalves, R. (2017). **Decentralized decision support for intelligent manufacturing in Industry 4.0**. *Journal of Ambient Intelligence and Smart Environments*, 9(3), 299–313. <https://doi.org/10.3233/AIS-170436> (ISI Web of Knowledge, 2016 JCR Science Edition, 5Y Impact Factor: 1.006).
 - 2017: Zacharewicz, G., Diallo, S., Ducq, Y., Agostinho, C., Jardim-Goncalves, R., Bazoun, H., Zhongjie, W., Doumeingts, G. (2017). **Model-based approaches for interoperability of next generation enterprise information systems: state of the art and future challenges**. *Information Systems and E-Business Management*, 15(2), 229–256. doi.org/10.1007/s10257-016-0317-8 (ISI Web of Knowledge, 2016 JCR Science Edition, 5Y Impact Factor: 1.551).
 - 2017: Ferreira, J., Sarraipa, J., Ferro-Beca, M., Agostinho, C., Costa, R., & Jardim-Goncalves, R. (2017). **End-to-end manufacturing in factories of the future**. *International Journal of Computer Integrated Manufacturing*, 30(1). doi.org/10.1080/0951192X.2016.1185155 (ISI Web of Knowledge, 2016 JCR Science Edition, 5Y IF: 1.938).
 - 2016: Agostinho, C., Ducq, Y., Zacharewicz, G., Sarraipa, J., Lampathaki, F., Poler, R., Jardim-Goncalves, R. (2016). **Towards a sustainable interoperability in networked enterprise information systems: Trends of knowledge and model-driven technology**. *Computers in Industry*, vol.79, pp.64-76. doi: 10.1016/j.compind.2015.07.001 (ISI Web of Knowledge, 2016 JCR Science Edition, 5Y Impact Factor: 2.731).
 - 2015: Agostinho, C. & Jardim-Goncalves, R. (2015). **Sustaining interoperability of networked liquid-sensing enterprises: A complex systems perspective**. *Annual Reviews in Control*, vol 39, 128-143. doi: 10.1016/j.arcontrol.2015.03.012 (ISI Web of Knowledge, 2015 JCR Science Edition, 5Y Impact Factor: 3.612).
 - 2015: Ferro-Beca, M., Sarraipa, J., Agostinho, C., Gigante, F., Jose-Nunez, M., Jardim-Goncalves, R. (2015). **A framework for enterprise context analysis based on semantic principles**. *Computer Science and Information Systems*, 12(3), 931–960. doi:10.2298/CSIS150105037F (ISI Web of Knowledge, 2015 JCR Science Edition, 5Y Impact Factor: 0.640).
 - 2013: Jardim-Goncalves, R., Grilo, A., Agostinho, C., Lampathaki, F., & Charalabidis, Y. (2013). **Systematisation of Interoperability Body of Knowledge: The foundation for EI as a science**. *Enterprise Information Systems*, 7(1), 7–32. doi:10.1080/17517575.2012.684401 (ISI Web of Knowledge, 2012 JCR Science Edition, 5Y Impact Factor: 4.771).

- 2013: Jardim-Goncalves, R., Agostinho, C., Sarraipa, J., Grilo, A., & Mendonça, J. P. (2012). **Reference framework for enhanced interoperable collaborative networks in industrial organisations.** *International Journal of Computer Integrated Manufacturing*, 26(1-2), 166–182. doi:10.1080/0951192X.2012.687130 (ISI Web of Knowledge, 2013 JCR Science Edition, 5Y Impact Factor: 1.143).
- 2012: Lampathaki, F., Koussouris, S., Agostinho, C., Jardim-Goncalves, R., Charalabidis, Y., & Psarras, J. (2012). **Infusing scientific foundations into Enterprise Interoperability.** *Computers in Industry*, 63(8), 858–866. doi:10.1016/j.compind.2012.08.004 (ISI Web of Knowledge, 2012 JCR Science Edition, 5Y Impact Factor: 2.062).
- 2012: Jardim-Goncalves, R., Agostinho, C., & Steiger-Garcão, A. (2012). **A reference model for sustainable interoperability in networked enterprises: towards the foundation of EI science base.** *International Journal of Computer Integrated Manufacturing*, 25(10), 855–873. doi:10.1080/0951192X.2011.653831 (ISI Web of Knowledge, 2012 JCR Science Edition, 5Y Impact Factor: 1.120).
- 2011: Jardim-Goncalves, R., Sarraipa, João, Agostinho, C. & Panetto, H. (2009) **Knowledge framework for intelligent manufacturing systems.** *Journal of Intelligent Manufacturing*, Vol. 22 (5) pp. 725-735. DOI: 10.1007/s10845-009-0332-4. (ISI Web of Knowledge, 2011 JCR Science Edition, 5Y Impact Factor: 1.414).
- 2007: Jardim-Goncalves, R., Agostinho, C., Malo, P. & Steiger-garcão, A. (2007) **Harmonising technologies in conceptual models representation.** *International Journal of Product Lifecycle Management*, 2 (2), p.pp.187–205.

Publications (Some other highlights)*

- Author of ~80 publications in book chapters and conference proceedings. O shortlist of selected papers can be found next:
- 2017: Mohammed, W. M., Aleixo, D., Ferrer, B. R., Agostinho, C., & Lastra, J. L. M. (2017). **Configuring and Visualizing The Data Resources in a Cloud-based Data Collection Framework.** In 23rd ICE/IEEE International Technology Management Conference (ICE/ITMC). Funchal, Portugal: IEEE.
- 2017: Agostinho, C., Ferreira, J., Pereira, J., Lucena, C., & Fischer, K. (2017). **Process Development for the Liquid-sensing Enterprise.** In Proceedings of the 5th International Conference on Model-Driven Engineering and Software Development (pp. 239–249). Porto, Portugal: SCITEPRESS. <https://doi.org/10.5220/0006331602390249>
- 2017: Lopes, F., Ferreira, J., Jardim-Goncalves, R., & Agostinho, C. (2017). **Semantic Maps for IoT Network Reorganization.** 2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC), Banff, Canada: IEEE
- 2017: Mozzaquatro, B. A., Agostinho, C., Melo, R., & Jardim-Goncalves, R. (2017). **A Model-Driven Adaptive Approach for IoT Security.** In S. Hammoudi, L. Pires, B. Selic, & D. P. (Eds.), *Model-Driven Engineering and Software Development. Communications in Computer and Information Science (CCIS)* (Vol. 692, pp. 194–215). Springer, Cham. https://doi.org/10.1007/978-3-319-66302-9_10
- 2016: Marques, M., Agostinho, C., Poler, R., Zacharewicz, G., & Jardim-Goncalves, R. (2016). **An architecture to support responsive production in manufacturing companies.** In 2016 IEEE 8th International Conference on Intelligent Systems (IS) (pp. 40–46). Sofia, Bulgaria: IEEE. <https://doi.org/10.1109/IS.2016.7737467>
- 2016: Marques-Lucena, C., Agostinho, C., Koussouris, S., Sarraipa, J., & Jardim-Goncalves, R. (2016). **Collaborative Knowledge Management Using Wiki Front-End Modules.** In S. Hammoudi, L. Maciaszek, E. Teniente, O. Camp, & J. Cordeiro (Eds.), *Enterprise Information Systems. Lecture Notes in Business Information Processing (LNBIP)* (Vol. 241, pp. 69–86). Springer, Cham. https://doi.org/10.1007/978-3-319-29133-8_4
- 2015: Ghimire, S., Melo, R., Agostinho, C., and Goncalves, R. (2015) **Continuous Data Collection Framework for Manufacturing Industries.** *On the Move to Meaningful Internet Systems: OTM 2015 Workshops (Industry Case Studies)*, Springer International Publishing, Rhodes, Greece, pp. 29–40. https://doi.org/10.1007/978-3-319-26138-6_5
- 2014: Agostinho, C., Pinto, P. & Jardim-goncalves, R. (2014) **Dynamic Adaptors to Support Model-Driven Interoperability and Enhance Sensing Enterprise Networks.** In: 19th World Congress of the International Federation of Automatic Control (IFAC'14). Cape Town, South Africa. DOI: 10.3182/20140824-6-ZA-1003.02601
- 2014: Duq, Y., Agostinho, C., Chen, D., Zacharewicz, G. & Jardim-Goncalves, R. (2014) **Generic Methodology for Service Engineering based on Service Modelling and Model Transformation.** In: S. Wiesner, C. Guglielmina, S. Gusmeroli, & G. Doumeingts eds. *Manufacturing Service Ecosystem: Achievements of the European 7th Framework Programme FoF-JCT Project MSEE: Manufacturing SService Ecosystem (Grant No. 284860)*. Verlag-Mainz, pp.41–49.
- 2014: Marcelino-Jesus, E., Sarraipa, J., Agostinho, C. & Jardim-Goncalves, R. (2014) **A Requirements Engineering Methodology for Technological Innovations Assessment.** In: 21st ISPE International Conference on Concurrent Engineering (CE2014). Beijing, China, IOS Press. DOI: 10.3233/978-1-61499-440-4-577
- 2011: Agostinho, C., Sarraipa, João, Goncalves, D. & Jardim-Goncalves, R. (2011) **Tuple-Based Semantic and Structural Mapping for a Sustainable Interoperability.** In *2nd Doctoral Conference on Computing, Electrical and Industrial Systems (DOCEIS'11)*. Caparica, Portugal: Springer. https://doi.org/10.1007/978-3-642-19170-1_5
- 2011: Ferreira, J., Agostinho, C., Sarraipa, João & Jardim-Goncalves, R. (2011) **Monitoring morphisms to support sustainable interoperability of enterprise systems.** In *On the Move to Meaningful Internet Systems: OTM 2011 Workshops (EI2N 2011)*. Hersonissos, Greece. https://doi.org/10.1007/978-3-642-25126-9_15
- 2010: Agostinho, C., Correia, F. & Jardim-Goncalves, R. (2010) **Interoperability of Complex Business Networks by Language Independent Information Models.** In *17th ISPE International Conference on Concurrent Engineering (CE2010)*. Cracow, Poland: Springer-Verlag. https://doi.org/10.1007/978-0-85729-024-3_12
- 2009: Agostinho, C. & Jardim-Goncalves, R. (2009) **Dynamic Business Networks: A Headache for Sustainable Systems Interoperability.** In *On the Move to Meaningful Internet Systems: OTM 2009 Workshops (EI2N 2009)*. Vilamoura, Portugal: Springer, pp.194–204. DOI: 10.1007/978-3-642-05290-3_30
- 2009: Sarraipa, J., Agostinho, C., Panetto, H., & Jardim-Goncalves, R. (2009). **Semantic Enrichment of Standard-based Electronic Catalogues.** *IFAC Proceedings Volumes*, 42(4), 163–168. DOI: 10.3182/20090603-3-RU-2001.0329
- 2006: Delgado, M., Agostinho, C., Malo, P. & Jardim-Goncalves, R. (2006) **A framework for STEP-based harmonization of conceptual models.** *3rd Int IEEE Conference Intelligent Systems (IS'06)*. London, UK. DOI:10.1109/IS.2006.348520

* Full list of publications can be found at:

- www.mendeley.com/profiles/carlos-agostinho/
 - ORCID: orcid.org/0000-0002-2884-776X
 - www.researchgate.net/profile/Carlos_Agostinho

European Research Projects

-  2013 - 2016: **OSMOSE** "OSMOsis Applications for the Sensing Enterprise" (FP7 ICT - 610905)
 - Local coordinator of UNINOVA's activities;
 - Project Lead of work package 2 for user scenarios specification, requirements engineering, and business validation;
 - Development of conceptual architecture, ontologies, and business processes to support the "liquid-sensing enterprise".
-  2011 - 2014: **IMAGINE** "Innovative End-to-end Management of Dynamic Manufacturing Networks" (FP7 FoF-ICT 285132)
 - Co-leadership of the Furniture Industry Living Lab to test the project's platform;
 - Specification of the software adaptors that mediate the communication among furniture legacy systems and the IMAGINE platform.
-  2011 - 2014: **MSEE** "Manufacturing Service Ecosystem" (FP7 FoF-ICT - 284860); Concluded: October 2014
 - Local coordinator of UNINOVA's activities
 - Model-driven service engineering and service model transformation.
-  2010 - 2013: **UNITE** "UpgradiNg ICT excellence by strengthening cooperation between research Teams in an enlarged Europe" (FP7 ICT - 248583)
 - Project Lead of work package 3 for the Secondment Programme in the areas of the Future Internet
-  2010 - 2012: **ENSEMBLE** "Envisioning, Supporting and Promoting Future Internet Enterprise Systems Research through Scientific Collaboration" (FP7 ICT - 257548)
 - Co-leadership of the of the Enterprise Interoperability Science Base (EISB);
-  2009 - 2012: **CRESCENDO** "Collaborative and Robust Engineering using Simulation Capability Enabling Next Design Optimisation" (FP7 AAT - 234344)
 - Project Lead of the BDA (Behavioural Digital Architecture) Model Store component requirements identification
 - Contributor to the Poweplant Integration prototype with model-driven interoperability implementations
-  2008 - 2010: **iSurf** "An Interoperability Service Utility for Collaborative Supply Chain Planning across Multiple Domains Supported by RFID Devices" (FP7 ICT 213031)
 - Definition and implementation of strategy for the evaluation of software and proof-of-concepts developed;
-  2006 - 2008: **Innovafun** "Applying open standards to INNOVate FUrNiture business processes" (FP6-INNOVATION - 31139)
 - Co-Leadership of the project's technical activities (Initial implementations on ISO10303-236, funStep services);
 - Project Lead of the "funStep Training Curriculum"
-  2004 - 2007: **ATHENA-IP** – "Advanced Technologies for interoperability of Heterogeneous Enterprise Networks and their Applications" (FP6 IST-507849)
 - Implementation of interoperability enabler services and demonstration within the furniture sector
-  2003 - 2007: **InterOP** – "Interoperability Research for Networked Enterprises Applications and Software" (FP6 IST-508011)
 - Definition and formalization of "Model Morphisms (MoMo)" (data models transformation) within the MoMo taskforce
-  2002 - 2005: **Smart-FM** "A Standards compliant framework to support complete integrated product life-cycle information Management And electronic commerce foR the furniture manufacturing (FM) industry, in THE advent of the smart enterprises" (FP5 IST-2001-52224)
 - Contribution to the development of draft ISO 10303-236, technical implementations and demonstration activities
-  2000 - 2002: **COFURN** "CO-operation for consensus, standardisation and interoperability to support e-com services in the FURNiture sector" (FP5 IST-2000-25183)
 - Contribution to the funStep multi-lingual web page development

National Research Projects

-  2010 - 2014: **PRODU[TECH]-PSI** "New Products and Services for the Manufacturing Industry" (QREN - 13849)
 - Special contributor on industrial systems interoperability using STEP (ISO 10303) standards.