University Academic Curriculum Vitae

Personal information

Full Name: Roberto Confalonieri

Academic Title: Ph.D. in Artificial Intelligence

Current Position: Assistant Professor at Free University of Bozen-Bolzano

Nationality: Italian

Date/place of birth: 26th March 1978, Bologna (Italy)

Current Address: via Tre Santi 1/A, 39100 Bolzano, Italy

Email: roberto.confalonieri@unibz.it

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LinkedIn: http://www.linkedin.com/in/rconfalonieri

CV Resume

I am Assistant Professor at the Free University of Bozen-Bolzano, Italy, and co responsible for the Smart Data Factory, an applied research center of the Faculty of Computer Science. I received my Ph.D. in Artificial Intelligence (with distinction) from the Polytechnic University of Catalonia (2011), and a M.Sc. in Computer Science from the University of Bologna. I have worked both in industry and in academia, as R&D engineer at NaradaRobotics S.L. (Spain), Assistant Professor at the University of Barcelona (2016), and postdoctoral researcher in several research institutions in Europe. My research interests include formalisms for reasoning with incomplete and uncertain information, agreement technologies, such as decision making and argumentation, and concept invention systems. I co-authored over 35 peer-reviewed journal and conference articles and I co-edited the book "Concept Invention: Foundations, Implementation, Social Aspects and Applications", to be published by Springer in 2017. I was awarded with the Best Paper Award at the Interational Computational Creativity Conference in 2016.

Present appointment

Since January 2017: Research Fellow and Assistant Professor at the Faculty of Computer Science, Free University of Bozen-Bolzano, Italy.

Main tasks:

I am co-responsible to lead the efforts of managing and running the Smart Data Factory lab at the NOI Techpark. The NOI Techpark aims at being a technological reference point in South-Tyrol, bringing together industries and members of the Faculty of Computer Science to engage in research-driven industrial collaborations.

Education since leaving school

June 2013: Master in Vocational Training and Language Teaching
Grade: *9,12/10*

February 2013: Tenure-track lecturer habilitation from the Catalan Agency University System Quality (AQU)

December 2011: Ph.D. in Artificial Intelligence, Universitat Politècnica de

Catalunya.

PhD Thesis "*The Role of Preferences in Logic Programming: Nonmonotonic Reasoning, User Preferences, Decision under Uncertainty*".
Advisors: Dr. Javier Vázquez-Salceda and Dr. Juan Carlos Nieves.
Grade: *Excellent Cum Laude*

The Ph.D. jury was composed by: Prof. Gerhard Brewka, Prof. Francesca Toni, Dr. Lluis Godo Lacasa and Dr. Stefan Woltran.

July 2009: Advanced Studies Diploma in Artificial Intelligence, Universitat Politècnica de Catalunya.
Grade: *Excellent*

March 2005: Laurea Magistrale in Informatica at the University of Bologna (Italy)
Thesis title: "*Un'ontologia per l'orchestrazione di servizi Web semantici*".
Advisors: Prof. Mauro Gaspari and Dr. John Domingue
Grade: *106/110*

Professional experience

October 2016 – December 2016: R&D Engineer at Narada Robotics S.L.

Main tasks:
I focused on integrating machine learning algorithms into Web applications and I developing an astrology application (http://astro.naradarobotics.com/horoscope).

November 2014 – September 2016: Postdoctoral Researcher at IIIA-CSIC (http://www.iiia.csic.es/) in the COINVENT European research project (http://www.coinvent-project.eu/).

Main tasks:
I was responsible of the development of a cognitive-based computational creativity system that aims at assisting humans in creative tasks such as music harmonisation and mathematics. Computational creativity has recently attracted a lot of interest among researchers in Artificial Intelligence and it aims at enhancing machine intelligence with cognitive models that have been studying how human creativity works.

October 2013 – October 2014: Adjunct Scientist at IIIA (Artificial Intelligence Research Institute) - CSIC (Spanish National Research Council)

Main tasks: I was involved in the transfer of a technology developed in the European project ACE (http://www.iiia.csic.es/en/project/ace), that is, a distributed agent-based platform for developing applications enhanced with social intelligence. I participated in the creation of SocialBrowsing, a spin-off of the Artificial Intelligence Research Institute (IIIA) of the Spanish National Research Council (CSIC).

SocialBrowsing's mission was to enable multiplayer applications – providing a platform for companies and developers to create online collaborative social applications. The platform will help people to transform their applications, allowing shared online experiences and above all creating new forms of social interaction.

November 2012 – August 2013: Part-time Postdoctoral Researcher at Goldsmiths College, University of London, in the ACE project (http://www.chistera.eu/projects/ace).

Main tasks: I was responsible of the integration of a Personal Assistant Agent architecture with the other components of the system, that are, a multi-modal

Professional experience (continued)

GUI and a peer-to-peer Electronic Institution infrastructure. The whole system, WeCurate, is a shared browser that allows users to collectively curate a group collection of images. The system was successfully trialled in the Horminam museum in London in November 2012. I was also involved in the data analysis for the system evaluation and in the scientific dissemination of the project results.

October 2011 – September 2012: Postdoctoral Researcher at Institut de Recherche en Informatique de Toulouse (http://www.irit.fr/-Equipe-ADRIA-) in the ACE project (http://www.iiia.csic.es/en/project/ace)

Main tasks: I was responsible of the design and implementation of a Personal Assistant Agent architecture. The agent architecture developed enriches online cultural experiences, specifically by enabling social aspects, such as shared browsing, and by assisting the users in making decisions, such as users' preference aggregation and argumentation-based multiple-criteria decision making. I was involved in the scientific dissemination of the project results (articles and deliverable writing).

2009 – 2011: Research Assistant at Universitat Politècnica de Catalunya (Barcelona) (https://kemlg.upc.edu/) in the ICT-ALIVE project.

Main tasks: I was responsible of the implementation of one of the use-cases of the project, that is, a system for the provision of context-aware services for citizens and tourists in Barcelona. My role was to develop a logic programming-based formalism for user profile representation and a preference reasoner able to calculate the preferred options for a user given a context. The reasoner was embedded in the ALIVE architecture such that personalised information was retrieved from context-aware services taking user preferences into account. I was also involved in the scientific dissemination of the project results (articles and deliverable writing).

2007 – 2009: Research Assistant at Universitat Politècnica de Catalunya (Barcelona) (https://kemlg.upc.edu/) in the IST-CONTRACT project.

Main tasks: I was responsible of the design and development of a middleware architecture for building contract-aware agent-based (Web) services. The architecture was supporting the provision and consumption of simple and composite Web services according to the specification of electronic contracts. I was also involved in the scientific dissemination of the project results (articles and deliverable writing).

2006: Research Assistant at the Economics Department of the University of Bologna (Italy) in the Rebag-Ware project.

Main tasks: I was technical manager and main programmer of the project. I implemented the Rebag-Ware prototype. Rebag-Ware allows users to rate public works online and to indirectly evaluate firms and public organisations about the fulfilment of their obligations to fight governance's corruption.

June 2005 – December 2005: NET Analyst Programmer at T.S.F. (Tele Sistemi Ferroviari) in Bologna (Italy)

Main tasks: I was hired as .Net programmer and I was involved in the development of a Web application for the intelligent scheduling of the rail traffic in the Italian rail infrastructure.

June 2004 – June 2005: Intern at the Knowledge Media Institute (KMI) (http://kmi.open.ac.uk/people/alumni/roberto-confalonieri) of the Open University (OU), Milton Keynes, UK in the EU DIP project (http://dip.semanticweb.org/)

Main tasks: I was involved in the extension of a Java- and LISP-based reasoning service platform (IRS-III) for the orchestration of Semantic Web Services according to an orchestration ontology that I proposed in the context of my Computer Science degree.

Awards

March 2014: 2nd Place in the 3rd edition of the VALORTEC contest

The VALORTEC competition was organized by ACCIÓ – the agency for competitiveness of Catalan companies of the Department of Enterprise and Employment - and rewarded the best business plans for emerging technologies in the field of Catalan universities. The 3rd edition saw about 50 proposals from which the jury chose 10 finalists. The finalists received a training program of 25 hours in order to prepare a business plan and to present it to exploitation technology specialists.

The jury consisted of representatives of ACCIÓ, CINC Center, Arvor Consulting, EAE Business School, IESE, Rousaud Costas Duran and Office Ponti. We were selected as 2nd best business plan and we received a prize in cash of 2.000 €.

http://www.dicat.csic.es/dicat/en/noticias/312-galardonado-el-proyecto-de-spin-off-social-browsing-del-iiia-csic

Experience in teaching

2016/17: Class: "*Automatic Reasoning in Answer Set Programming*"
Class Level: MOOC, Master in Artificial Intelligence - Universitat Politecnica de Valencia

2016/17: Class: "*Introduction to Programming*"
Class Level: Bachelor Degree in Computer Science Engineering, Universitat of Barcelona.
Course load: 30 hours, 25 Students (approx.)

2015-16-17: Class: "*Software Development*"
Class Level: Vocational Training in Computer Science, Barcelona (Spain)
Course load: 66 hours, 50 Students (approx.)

2014: Class: "*Web application development using Java and MySQL*"
Class Level: Vocational Training in Computer Science, Barcelona (Spain)
Course load: 240 hours, 15 Students (approx.)

2010/2011: Class: "*Applications of Artificial Intelligence (AIA)"*
Class Level: Engineering in Computer Science at Universitat Politècnica de Catalunya, Barcelona (Spain)
Course load: 15 hours, 25 Students (approx.)

2005/2006: Class: "*Computer Architecture*"
Class Level: Computer Science Degree at the University of Bologna (Italy)
Course load: 40 ours, 50 Students (approx.)

Research Summary

My research activity can be classified into three main areas: Knowledge Representation (KR), Multi-agent Systems (MAS), and Computational Creativity (CC).

My research in KR focuses on Reasoning under Incomplete and Uncertain Information, User Preferences, and Decision Making under Uncertainty, with emphasis on Answer Set Programming (ASP). I proposed several theoretical frameworks that extend the standard ASP syntax and semantics to deal with preferences and qualitative uncertainty [4,26,27,29], nested preferences [5,25], decision making under uncertainty [3,6,23], and flexible preference queries to uncertain databases [4,20]. Thanks to my programming skills, I engineered these frameworks into proof-of-concept prototypes. Some of them have been applied to applications such as context-aware recommendation systems [21,22,29,35].

My research in MAS is mainly concerned in using agent technology to develop socio-technical systems by means of Electronic Institutions [2,14,15,16,17,18,19]. Other topics of research were intelligent contracting agents [28,30,31,32], and reputation mechanisms applied to public governance [33].

Recently, I started to work in CC in the formalisation and implementation of Fauconnier and Turner's cognitive theory of conceptual blending for modelling human creativity. This research is challenging and is related to research topics such as the integration of description logic knowledge bases [1,10], the use of argumentation to evaluate the outcomes of knowledge integration [8,9,12], and the implementation of conceptual blending as a semiotic system [11,13] and in description logics [7,10].

R&D projects

Since January 2016 – Co-Investigator in the COCO project at UNIBZ.

COCO project: The Computational Technologies for Concept Invention (COCO) project is a research project funded by UNIBZ that aims at integrating agreement technologies, such as argumentation and coherence, with ontologies to build computational models of concept invention.

November 2014 – September 2016 Postdoctoral Researcher in the COINVENT project.

COINVENT project: COINVENT (FET-611553 is an European research project with a topic at the intersection between cognitive science, computational creativity, cognitive artificial intelligence, and formal methods in computer science, conducted by seven international academic partners (http://www.coinvent-project.eu/)

2012 – 2013 Part-time Postdoctoral Researcher in the ACE project.

2011 – 2012 Postdoctoral Researcher in the ACE project.

ACE project: ACE (CHRI-001-03) is a research project funded by the European Commission in the context of CHIST-ERA (European Coordinated Research on Long-term Challenges in Information and Communication Sciences & Technologies ERA-Net). The aim of the project is about exploiting the predominance of social networking using autonomic software agents to enrich, encourage and enliven engagement with online cultural artefacts such as from a museum or a gallery for *"Autonomic Software Engineering for online cultural experiences"* (http://www.chistera.eu/projects/ace)

2009 – 2011: Research Assistant in the ICT-ALIVE project.
ALIVE project: ALIVE (FP7-215890) is a research project funded by the European Commission in the context of the 7th Framework Program. The aim of the project is to develop frameworks, components and tools for "*Coordination, Organisation and Model Driven Approaches for Dynamic, Flexible, Robust Software and Services Engineering*" (http://cordis.europa.eu/project/rcn/85311_en.html)

2007 – 2009: Research Assistant in the IST-CONTRACT project.

CONTRACT project: CONTRACT (INFSO-IST-034418) is a research project funded by the European Commission in the context of the 6th Framework Program. The aim of the project was to develop frameworks, components and tools for "*Contract based e-Business System Engineering for robust, verifiable, Cross-Organisational Business Applications*".

2006: Research Assistant in the Rebag-Ware project.

Rebag-Ware project: Rebag-Ware is a research project founded by the Economics Department of the University of Bologna (Italy), whose aim was to develop the technical infrastructure for *Reputation-based Governance of Public Works*, a governance philosophy that hinges on the reputation of the individuals and organisations contributing to the execution of policies.

2004 – 2005: Intern and Consultant in the DIP project.

DIP project: The DIP project is a research project funded by the European Commission for developing framework and tools for *Data, Information, and Process Integration with Semantic Web Services* (http://dip.semanticweb.org/).

Publications

Books

Concept Invention: Foundations, Implementation, Social Aspects and Applications. *Edited with Schorlemmner, M, Pease, A., Besold, T., Kaliakatsos, M., Kutz, O., and Maclean, E*. Springer, series in Computational Synthesis and Creative Systems, to be published in 2017.

Journals

2016 * [1] *Confalonieri, R.,* Eppe, M., Schorlemmer, M., Kutz, O., Peñaloza, R., Plaza, E. *Upward Refinement Operators for Conceptual Blending in the Description Logic EL++*. Accepted for publication in Annals of Mathematics and Artificial Intelligence.

2015 * [2] *Confalonieri, R.*, Yee-King, M., Hazelden, K., de Jonge, D., Sierra, C., d'Inverno. M., Amgoud, L., Osman, N. *Engineering Multiuser Museum Interactives for Shared Cultural Experiences*. Accepted for publication in Engineering Applications of Artificial Intelligence, ISSN 0952-1976. Impact factor: 1,96

2014 * [3] *Confalonieri, R.,* Prade, H. Using *Possibilistic Logic for Modeling Qualitative Decision: Answer Set Programming Algorithms*. International Journal of Approximate Reasoning, 2014, http://dx.doi.org/10.1016/j.ijar.2013.11.002, Impact factor: 1,729

Publications

2012 * [4] *Confalonieri, R.,* Nieves, J.C., Osorio, M., Vázquez-

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Salceda, J.: *Dealing with Explicit Preferences and Uncertainty in Answer Set Programming***.** Annals of Mathematics and Artificial Intelligence 65, 2-3, 159-198, 2012, DOI 10.1007/s10472-012-9311-0, Impact factor: 0,358

2011

* [5] *Confalonieri, R.,* Nieves, J.C. *Nested Preferences in Answer Set Programming*. Fundamenta Informaticae 113(1), pp. 19-39, 2011, DOI 10.3233/FI-2011-597, Impact factor: 0,365

* [6] Nieves, J.C., *Confalonieri, R.* A *Possibilistic Argumentation Decision Making Framework with Default Reasoning*. Fundamenta Informaticae 113(1), pp. 41-61, 2011, DOI 10.3233/FI-2011-598, Impact factor: 0,365

Conferences

2016

[7] *Confalonieri, R.,* Schorlemmer, M., Kutz, O., Peñaloza, R., Plaza, E., Eppe, M. *Conceptual Blending EL*++. International Workshop on Description Logic (DL2016), co-located with KR-2016.

[8] *Confalonieri, R*, Plaza, E., Schorlemmer, M. *A Process Model for Concept Invention* In 7th International Conference on Computational Creativity (ICCC 2016).

[9] Kaliakatsos, M., *Confalonieri, R.,* Corneli, J., Zacharakis, A., Cambouropoulos, E.. *An Argument-based Assistant for Harmonic Blending*. In 7th International Conference on Computational Creativity (ICCC 2016).

2015

[10] *Confalonieri, R.,* Eppe, M., Schorlemmer, M., Kutz, O., Peñaloza, R., Plaza, E. *Upward Refinement for Conceptual Blending in Description Logic: An ASP-based approach and Case Study in EL*++. International Workshop on Ontologies and Logic Programming for Query Answering (ONTOLP), co-located with IJCAI-2015.

* [11] Eppe, M., Maclean, E., *Confalonieri,* R., Kutz, O., Schorlemmer, M., Plaza, E. *ASP, Amalgamation, and the Conceptual Blending Workflow*. Proceedings of the 13th International Conference on Logic Programming and Nonmonotonic Reasoning, LPNMR 2015, Lexington, KY, USA, September 27-30, 2015.

[12] *Confalonieri, R.,* Corneli, J., Pease, A., Plaza, E., Schorlemmer, M. *Using Argumentation to Evaluate Concept Blends in Combinatorial Creativity*. In proceedings of the Sixth International Conference on Computational Creativity, ICCC 2015.

* [13] Eppe, M. *Confalonieri, R.,* Maclean, E., Kaliakatsos, M., Cambouropoulos,, E., Schorlemmer, M., Codescu, M., Kühnberger, K. *Computational invention of cadences and chord progressions by conceptual chord-blending*. In Proceedings of International Joint Conference on Artificial Intelligence, IJCAI-15.

2013

[14] Osman, N., d'Inverno, M., Sierra, C., Amgoud, L., Prade, H., Yee-King, M., Confalonieri, R., de Jonge, D., Hazelden, K. *An Experience-Based BDI Logic: Motivating Shared Experiences and Intentionality*. Accepted in the 39th Annual Conference of

Publications

(continued)

the IEEE Industrial Electronics Society (IECON 2013) special track on Cognitive Architectures and Multi-Agent Systems

* [15] Yee-King, M., *Confalonieri, R.,* de Jonge, D., Hazelden, K., Sierra, C., d'Inverno. M., Amgoud, L., Osman, N. *Multiuser Museum Interactives for Shared Cultural Experiences: an Agent Based Approach*. In Gini, M, Shehory, O., (eds.), Proceedings of the 2013 international conference on Autonomous agents and multi-agent systems (AAMAS2013), 917-924, International Foundation for Autonomous Agents and Multiagent Systems Richland, SC, 2013.

[16] Hazelden, K., Yee-King, M., *Confalonieri, R.,* Ghedini, F., de Jonge, D., Sierra, C., d'Inverno. M., Amgoud. L. *WeCurate: Multiuser Museum Interactives for Shared Cultural Experiences*. In Mackay, W., (eds.), Proceedings of 2013 ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'13), 571-576, ACM New York, NY, USA, 2013

2012

[17] Yee-King, M., *Confalonieri, R.,* de Jonge, D., Osman, N., Hazelden, K., Amgoud, L., Prade, H., Sierra, C., d'Inverno, M. *Towards Community Browsing for Shared Experiences: The WeBrowse System*. In Proceedings of 1st International Conference on Agreement Technologies, 201-202, Dubrovnik, Croatia, October 2012

[18] Hazelden, K., Yee-King, M., Amgoud, L. d'Inverno, M., Sierra, C., Osman, N., Confalonieri, R., de Jonge, D. WeCurate: *Designing for synchronised browsing and social negotiation*. In Proceedings of 1st International Conference on Agreement Technologies, 168-179, Dubrovnik, Croatia, October 2012

* [19] Amgoud, L., *Confalonieri, R.,* de Jonge, D., d'Inverno, M., Hazelden, K., Osman, N., Prade, H., Sierra, C., Yee-King, M. *Sharing online cultural experiences: An argument-based approach*. In: V. Torra et. al., (eds), Proceedings of 9th International Conference on Modeling Decisions for Artificial Intelligence, (MDAI 2012), LNCS, vol. 7647, pages 282-293, Springer Berlin Heidelberg, 2012, DOI 10.1007/978-3-642-34620-0_26

* [20] *Confalonieri R.,* Prade, H.: *Encoding Preference Queries to an Uncertain Database in Possibilistic Answer Set Programming*. In: S. Greco et. al., (eds), Advances in Computational Intelligence: Proceedings of 14th International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems, (IPMU 2012), Part I Communications in Computer and Information Science, volume 297, pages 511-520, Springer Berlin Heidelberg, 2012, DOI 10.1007/978-3-642-31709-5_52

* [21] *Confalonieri R.,* Iñan, H, Palau, M.: *Handling Uncertain User Preferences in a Context-aware System*. In: S. Greco et. al., (eds), Advances in Computational Intelligence: Proceedings of 14th International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems, (IPMU 2012), Part II Communications in Computer and Information Science, volume 298, pages 88-97, Springer Berlin Heidelberg, 2012, DOI 10.1007/978-3-642-31715-6_11

Publications

[22] Alonso, K., Zorrilla, M., J., Iñan, H., Palau, M., *Confalonieri,*

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R., Vázquez-Salceda, J., Calle, J., Castro, E.: *Ontology-based tourism for all recommender and information retrieval system for Interactive Community Displays*, Information Science and Digital Content Technology (ICIDT), 2012 8th International Conference on, 3, June 2012, 650–655, ISBN 978-1-4673-1288-2

2011

[23] *Confalonieri R.,* Prade, H.: *Answer Set Programming for Computing Decision under Uncertainty*. In Liu, W. (eds.), Proceedings of the 11th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU2011), LNAI vol. 6717, pp. 485-496, Springer-Verlag, Berlin Heidelberg, 2011, DOI 10.1007/978-3-642-22152-1_41

[24] *Confalonieri R.,* Prade, H., Nieves, J.C.: *Handling Exceptions in Logic Programming without Negation as Failure*. In Liu, W. (eds.), Proceedings of the 11th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU2011), LNAI vol. 6717, pp. 509-520, Springer-Verlag, Berlin Heidelberg, 2011, DOI 10.1007/978-3-642-22152-1_43

2010

[25] *Confalonieri R.,* Nieves, J.C.: *Nested Logic Programs with Ordered Disjunctio*n. 6th Latin American Workshop on Non-Monotonic Reasoning 2010, 677, CEUR-WS.org, 2010, 55–66

* [26] *Confalonieri, R.,* Nieves, J.C., Osorio, M., Vázquez-Salceda, J.: *Possibilistic Semantics for Logic Programs with Ordered Disjunction***.** In: Prade, H., Link, S. (eds.), FoIKS2010: International Symposium on Foundations of Information and Knowledge Systems. LNCS vol. 5956, pp. 133-152, Springer Berlin Heidelberg, Sofia, Bulgaria, February 2010, DOI 10.1007/978-3-642-11829-6_11

2009

* [27] *Confalonieri, R.,* Nieves, J.C., Vázquez-Salceda, J.: *Pstable Semantics for Logic Programs with Possibilistic Ordered Disjunction*. In: Serra, R., Cucchiara, R. (eds.), AI*IA 2009: Emergent Perspectives in Artificial Intelligence. LNAI vol. 5883, pp. 52–61, Springer-Verlag, Berlin Heidelberg, Reggio Emilia, Italy, December 2009, DOI 10.1007/978-3-642-10291-2_6

[28] Lam, J.S.C., Vasconcelos, W.W., Guerin F., Corsar, D., Chorley, A., Norman, T.J., Vázquez-Salceda, J., Panagiotidi, S., Confalonieri, R., Gomez, I., Hidalgo, S., Álvarez-Napagao, S., Nieves, J.C., Palau, M., Ceccaroni, L., Aldewereld, H., Dignum, V., Dignum, F., Penserini, L., Padget, J., De Vos, M., Andreou, D., Cliffe, O., Staikopoulos, A., Popescu, R., Clarke, S., Sergeant, P., Reed, C., Quillinan, T., Nieuwenhuis, K.: *ALIVE: A Framework for Flexible and Adaptive Service Coordination*. ESAW 2009: 236-239, DOI 10.1007/978-3-642-10203-5_21

[29] *Confalonieri, R.,* Nieves, J.C., Vázquez-Salceda, J.: *A Preference Meta-Model for Logic Programs with Possibilistic Ordered Disjunction*. In Proceedings of the Workshop on Software Engineering for Answer Set Programming (SEA'09), Postdam, Germany, 14 September 2009

[30] Vázquez-Salceda, J., Confalonieri R., Gomez, I., Storms, P., Kuijpers, N., Panagiotidi, S., Alvarez, S.: *Modelling Contractually Bounded Interactions in the Car Insurance Domain*. In Proceedings of the First International ICST Conference on Digital Business -DIGIBIZ 2009-, London, June 2009. ISBN:

Publications (continued)

978-963-9799-56-1

2008 * [31] *Confalonieri, R.,* Álvarez-Napagao, S., Panagiotidi, S., Vázquez-Salceda, J., and Willmott, S. *A Middleware Architecture for Building Contract-Aware Agent-Based Services*. In Proceeding of Service-Oriented Computing: Agents, Semantics, and Engineering (SOCASE 2008). R. Kowalczyk et al. (Eds.): SOCASE 2008, LNCS 5006, pp. 1–14, 2008. Springer-Verlag Berlin Heidelberg 2008, DOI 10.1007/978-3-540-79968-9_1

[32] Panagiotidi, S., Vázquez-Salceda, J., Álvarez-Napagao, S., Ortega-Martorell, S., Willmott, S., Confalonieri, R., Storms, P.: *Intelligent Contracting Agents Language*. In Proceedings of the AISB Symposium on Behaviour Regulation in Multi-Agent Systems (BRMAS 2008), Aberdeen, UK, 2008

2007 [33] *Confalonieri, R.,* Leoni, C., Picci, L.: Rebag-Ware: *Reputation-based Governance of Public Works*. In Cunningham, P., Cunningham, M. (eds.) IST-Africa 2007 Conference Proceedings IIMC International Information Management Corporation, 2007, ISBN: 1-905824-04-1

2004 * [34] *Confalonieri, R.,* Domingue, J., Motta, E.: *Orchestration of Semantic Web Services in IRS-III.* In Proceedings of the First AKT Workshop on Semantic Web Services (AKT-SWS04) KMi, The Open University, Milton Keynes, UK, December 8, 2004

Technical Reports * [35] *Confalonieri, R.,* Nieves, J.C., Vázquez-Salceda, J.: *Towards an Implementation of a Preference- and Uncertain-Aware Solver Using Answer Set Programming.* Research Report LSI-10-16-R, UPC - LSI, June 2010. Available at: http://www.lsi.upc.edu/~techreps/files/R10-16.zip

[36] Lopes, J.S., Alvarez, S., Confalonieri, R., Vázquez-Salceda, J.: *USE: a Multi-Agent User-Driven Recommendation System for Semantic Knowledge Extraction*. Research Report LSI-09-20-R, UPC-LSI, June 2009. Available at: http://www.lsi.upc.edu/~techreps/files/R09-20.zip

[37] *Confalonieri, R.,* Nieves, Vázquez-Salceda, J.: *Logic Programs with Possibilistic Ordered Disjunction*. Research Report LSI-09-19-R, UPC - LSI, May 2009. Available at: http://www.lsi.upc.edu/~techreps/files/R09-19.zip

Thesis Direction

PeerFlow Cloud: Migración de P2P a Elastic Cloud Computing, Universitat Autònoma de Barcelona, July 2015.
Student: Germán Arranz Cobo
Level: B.Ed. in Telecommunications engineering
Discipline: Artificial Intelligence
Qualification: *Notable*

Combining Coordination and Organisation Mechanisms for the Development of a Dynamic Context-aware Information System Personalised by means of Logic-based Preference Methods, Universitat Politècnica de Catalunya, September 2010 (http://upcommons.upc.edu/pfc/handle/2099.1/11318).
Student: Palau Manel.
Level: Master thesis
Discipline: Artificial Intelligence

Qualification: *Excellent*

Research and travel grants

2011: Travel grant for Ph.D. European mention

2011: Short Term Scientific Mission in COST Action Number IC0602 Algorithmic Decision Theory

2004: Travel grant of the University of Bologna (Italy) for a research internship in relation to the Computer Science degree thesis

Abroad experiences

November 2012 – August 2013: Part-time Postdoctoral Researcher at Computing Department, Goldsmiths College, University of London, UK.

October 2011 – September 2012: Postdoctoral Researcher at the Institut de Recherche en Informatique de Toulouse (IRIT) of Université Paul Sabatier in Toulouse, France.

October 2010 – February 2011: Invited Pre-doctoral Researcher at the Institut de Recherche en Informatique de Toulouse (IRIT) of Université Paul Sabatier in Toulouse, France.

June 2004 – June 2005: Internship at Knowledge Media Institute (KMI) at the Open University (OU), Milton Keynes, UK

Entrepreneurship

I have been involved in the technology transfer of the results obtained in the European research project ACE. I won the 2nd price of the VALORTEC contest by presenting and defending a business plan about the exploitation of the ACE technology. Besides, I received entrepreneurship training as part of the contest itself.

Member of

Catalan Association for Artificial Intelligence (CCIA)
Associazione Italiana per l'Intelligenza Artificiale (AI*IA)

Reviewer of

International Semantic Web Conference (ISWC 16)
7th International Conference on Computational Creativity (ICCC 16)
14th International Conference on Principles of Knowledge Representation and Reasoning (KR14)
22th, 24th and 25th International Conference on Electronics, Communications and Computers (CONIELECOMP 2012, 2014, 2015)
International Journal of Approximate Reasoning (IJAR)
Expert Systems With Applications (ESWA)

Language competence

Italian, Native proficiency

English, Professional working proficiency (C1 - Cambridge)

Spanish, Professional working proficiency (C1 – Cervantes)

Catalan, Professional working proficiency (C1 – CNL Barcelona)

German Professional working proficiency (C1 – Goethe Institute, Barcelona)

Collaborators

Goldsmiths College London: Goldsmiths has a reputation for innovative,

(past and present)	interdisciplinary and challenging approaches to all its subjects; a particular strength in the creative and cultural dimensions of science, the arts, humanities and social sciences; and a strong record of widening participation in disadvantaged communities of south east and east London. Contacts: Prof. Mark d'Inverno and Dr. Matthew Yee-King **IIIA-CSIC:** The IIIA (Artificial Intelligence Research Institute) is a public-funded research centre in Bellaterra, belonging to the Spanish Council for Scientific Research. Its main activity is research in Artificial Intelligence. Contact: Prof. Carles Sierra, Dr. Marco Schorlemmer **IRIT** (Institut de Recherche en Informatique de Toulouse) represents one of the major potential of the French research in computer science. The laboratory has 19 research groups which are dispatched in seven scientific themes covering all the computer science domains. One of these groups is concerned by Artificial Intelligence, namely modeling reasoning and decision processes. Contact: Dr. Henri Prade and Dr. Leila Agmoud **UPC BarcelonaTech:** The UPC's Knowledge Engineering and Machine Learning group (KEMLg) in Barcelona has a long history of contributions in coordination and organisation techniques for large scale distributed systems agent technology. Contacts: Prof. Ulises Cortés and Dr. Javier Vázquez-Salceda

The undersigned Roberto Confalonieri gives his consent to his personal data being processed, within the limits of the legislative decree 196/2003, for formalities connected with the present procedure.

Date Signature