Chiara Ghidini

Curriculum Vitae

Current position

2003-current Senior Research Scientist, Fondazione Bruno Kessler (Formerly Center for Scientific and Technological Research (ITC-irst), Trento, Italy.
 Since December 2013 member of the Data and Knowledge Management research unit. From January 2014 leader of the Shape and Evolve Living Knowledge joint research unit.

Education

June 1998 PhD in Computer Science Engineering (Dottorato di Ricerca in Ingegneria Informatica), joint program of the Università "La Sapienza" di Roma and the Università di Trento, Italy.

Title of the Thesis: "Local Models Semantics. Theory and two relevant applications". Supervisor: Professor Fausto Giunchiglia (Università di Trento). The research involved the definition of a semantics for contextual reasoning, and its application for capturing some relevant theoretical aspects of distributed information systems and multi-agent systems.

February 1994 Master Degree in Computer Science (Laurea in Scienze dell'Informazione), Università degli Studi di Milano, Milan, 110/110 cum laude (first class degree).
 Title of the Thesis: "Semantiche a Modelli Locali per Logiche Multicontestuali" (Local Models Semantics for Multi Contex Logics). Supervisors: Professor Giovanni Degli Antoni (Università di Milano), and Professor Fausto Giunchiglia (IRST, Trento).

Research Interests

Development and application of formal frameworks and methodological support for capturing theoretical and practical aspect of distributed knowledge representation systems (with particular emphasis to ontology and business process modelling).

Previous appointments held

01/2001- Lecturer, Department of Computer Science, University of Liverpool, Liverpool, UK.

- 04/2003 Member of the *Logic and Computation* group. My main research activity did concern the study and definition of formal systems for the specification and logical execution of rational agents. Lecturer in charge of the module "Advanced database management" for both undergraduate and postgraduate students, and of the module "Distributed Information systems" for postgraduate students.
- 09/1998- **Research Fellow**, Department of Computing and Mathematics, Manchester Metropolitan 12/2000 University (MMU), Manchester, UK.

Member of the Centre for Agent Research and Developement at the Department of Computing and Mathematics, Manchester Metropolitan University. My main research activity inside the Centre was focused on the application of multi-context logics to agent-based systems.

Selected publications

Journal C. Di Francescomarino, C. Ghidini, and M. Rospocher. *Evaluating Wiki Collaborative* Articles *Features in Ontology Authoring*. IEEE Transactions on Knowledge and Data Engineering, 26(12):2997 –3011, 2014. C. Ghidini, C. D. Francescomarino, M. Rospocher, P. Tonella, and L. Serafini. Semantics based aspect oriented management of exceptional flows in business processes. Systems, Man, and Cybernetics, Part C: Applications and Reviews, IEEE Transactions on, 42(1):25-37, January 2012.

C. D. Francescomarino, C. Ghidini, M. Rospocher, L. Serafini, and P. Tonella. A framework for the collaborative specification of semantically annotated business processes. Journal of Software Maintenance and Evolution: Research and Practice, 23(4):261-295, June 2011.

M. Fisher and C. Ghidini. Executable specifications of resource-bounded agents. Journal of Autonomous Agents and Multi-Agent Systems, 21(3):368-396, August 2010.

P. Bouquet, C. Ghidini, F. Giunchiglia, and E. Blanzieri. Theories and uses of context in knowledge representation and reasoning. Journal of Pragmatics. 35(3):455-484, Elsevier Science. March 2003.

C. Ghidini, and F. Giunchiglia. Local Models Semantics, or Contextual Reasoning = Locality + Compatibility. Artificial Intelligence. 127(2):221-259,2001.

M. Benerecetti, P. Bouquet, and C. Ghidini. Contextual Reasoning Distilled. In Philosophical Foundations of Artificial Intelligence. A special issue of the Journal of Experimental and Theoretical AI (JETAI). Volume 12, Number 3, July 2000.

Recent C. Di Francescomarino, C. Ghidini, S. Tessaris, and I. V. Sandoval. Completing workflow Conference traces using action languages. In Proceedings of the 27th International Conference on Advanced Information Systems Engineering (CaiSE 2015), 2015. 314-330 Papers

> P. Bertoli, F. Corcoglioniti, C. Di Francescomarino, M. Dragoni, C. Ghidini, M. Nori, M. Pistore, and R. Tiella. Semantic-based Process Analysis. In Proceedings of the 13th International Semantic Web Conference (ISWC2014), volume 8797 of Lecture Notes in Computer Science, pages 228-243. Springer International Publishing, 2014.

> M. Rospocher, C. Ghidini, and L. Serafini. An ontology for the Business Process Modelling Notation. In P. Garbacz and O. Kutz, editors, Proceedings of the 8th International Conference on Formal Ontology in Information Systems (FOIS 2014), volume 267 of Frontiers in Artificial Intelligence and Applications, pages 133 –146. IOS Press, 2014.

> F. M. Maggi, C. Di Francescomarino, M. Dumas, and C. Ghidini. Predictive monitoring of business processes. In M. Jarke, J. Mylopoulos, C. Quix, C. Rolland, Y. Manolopoulos, H. Mouratidis, and J. Horkoff, editors, Proceedings of the 26th International Conference on Advanced Information Systems Engineering (CAiSE 2014), volume 8484 of Lecture Notes in Computer Science, pages 457-472. Springer, 2014.

> C.M. Keet, M.T. Khan, and C. Ghidini. Ontology Authoring with FORZA. In Proceedings of the 22Nd ACM International Conference on Conference on Information & Knowledge Management, ACM, 2013.

> L. Bozzato, C. Ghidini, and L. Serafini. Comparing contextual and flat representations of knowledge: a concrete case about football data. In Proceedings of the seventh international conference on Knowledge capture, ACM, 2013.

> A. Borgida, M. Atencia, J. Euzenat, C. Ghidini, and Luciano Serafini. A Formal Semantics for Weighted Ontology Mappings. In Proceedings of the 11th International Semantic Web Conference (ISWC2012), Springer Berlin Heidelberg, 2012.

> C. Casagni, C. Di Francescomarino, M. Dragoni, L. Fiorentini, L. Franci, M. Gerosa, C. Ghidini, F. Riz- zoli, M. Rospocher, A. Rovella, L. Serafini, S. Sparaco, and A. Tabarroni. Wiki-based conceptual modeling: An experience with the public administration. In The Semantic Web -Proceedings of ISWC 2011, volume 7032 of Lecture Notes in Computer Science, pages 17-32. Springer Berlin / Heidelberg, 2011.

recent Organisational Activities

- 2016 PhD symposium co-chair of the 13th Extended Semantic Web Conference (ESWC 2016) Workshop & tutorial co-chair of the 15th International Semantic Web Conference (ISWC 2014)
- 2014 Local co-organiser of the 13th International Semantic Web Conference (ISWC 2014) PhD Symposium co-chair at the 19th International Conference on Knowledge Engineering and Knowledge Management (EKAW2014)
- 2013 Workshop & Tutorial co-chair at the 2013 K-CAP conference (K-CAP 2013)
- 2012 Ontology track chair at the 9th Extended Semantic Web Conference (ESWC 2012)
- 2011 Programme co-chair of I-semantics 2011
- 2009 Tutorial co-chair of the 6th Annual European Semantic Web Conference (ESWC 2009)

Selected Research Projects

- 2013-current FBK Grant holder of the EU project SO-PC-Pro (Subject-Orientation for People-Centred Production). Scientific Coordinator: Dr. Matthias Neubauer (Universitaet Linz, Austria)
- 2011-current FBK Grant holder of the EU project *Organic.Lingua*. Scientific Coordinator: Dr. Salvador Sanchez-Alonso (University of Alcalá, Spain)
- 2013-current FBK grant holder of the Industrial Project *PRESTO: Plausible Representation of Emergency Scenarios for Training Operations* in collaboration with DELTA Informatica
 - 2010-2012 Involved in the Industrial Project *Promo: A Collaborative and Agile Service-Based Approach* to the Modeling and Monitoring of Business Porcesses in collaboration with SAYservice
 - 2010-2012 Involved in the CISIS Inter-regional project *Progetto Dematerializzazione (ProDe)*. Coordinator: Andrea Nicolini.
 - 2006-2010 Involved in the EU IP project *Advanced Process-Oriented Self-Directed Learning Environment* (*APOSDLE*). Scientific Coordinator: Dr. Stefanie Lindstaedt (Know-Center, Graz, Austria)
 - 2006-2009 Involved in the FIRB project *Representing Organizational Knowledge: models and digital applications for distributed sytems of firms.* Grant-holder: Prof. Massimo Warglien, Universitá Ca'Foscari, Venezia.
 - 2002-2003 Awarded a Nuffield Research grant for newly appointed lecturers. Title of the project *A* formal framework for distributed information management. The grant provides 3000GBP to support travel and international collaborations.

Awards

- 2014 Best Research Paper Award at the 18th Enterprise Computing Conference (IEEE EDOC 2014). Paper title: C. Di Francescomarino, M. Rospocher, C. Ghidini, and A. Valerio. The Role of Semantic Annotations in Business Process Modelling.
- 2012 Honorable mention at the Semantic Web Research Track of the 11th International Semantic Web Conference (ISWC 2012). Paper title: Alexander Borgida, Manuel Atencia, Jérôme Euzenat, Chiara Ghidini, Luciano Serafini. A Formal Semantics for Weighted Ontology Mappings.
- 2008 Honorable mention at the Semantic Web In Use Track of the 7th International Semantic Web Conference (ISWC 2008). Paper title: Conny Christl, Chiara Ghidini, Joanna Guss, Viktoria Pammer, Marco Rospocher, Stefanie Lindstaedt, Peter Scheir, and Luciano Serafini. Deploying semantic web technologies for work integrated learning in industry. a comparison: Sme vs. large sized company.

1998 Best Paper Award at the VIII International Conference on Artificial Intelligence: Methodology, Systems, Applications (AIMSA'98), Sozopol (Bulgaria), 21-23 settembre 1998. Paper title: M. Benerecetti, P. Bouquet, C. Ghidini, Formalizing Belief Reports. The approach and a Case Study.

Selected Teaching experience

- 2011-2015 Lecturer (together with Luciano Serafini) for the module "Logics for Knowledge Representation and Semantic Web" for Doctoral students at the International Doctoral School, University of Trento.
- 2014-2015 Lecturer for the module *"Mathematical Logic"* for undergraduate students at the University of Trento, Itay.
 - 1/2002 Lecturer in charge of the module "Advanced database management" for both undergrad-
 - 4/2003 uate and postgraduate students, and of the module "*Distributed Information systems*" for postgraduate students at the Department of Computer Science, University of Liverpool.
 - 9/2000 Teaching assistant for the undergraduate module *"Program and Data Structures"* at the 12/2000 Department of Computing and Mathematics, MMU.
- 11/1999 Teaching assistant for the undergraduate module *"Programming"* at Department of Com-6/2000 puting and Mathematics, MMU.
- 2/1998 Teaching assistant for the undergraduate module *"Linguaggi e Traduttori"* (Compilers). 6/1998 Università di Trento (25 hours).
- 2/1996 Teaching assistant for the undergraduate module *"Linguaggi e Traduttori"* (Compilers).
 6/1996 Università di Trento (25 hours).
- 9/1994 Teaching assistant for the undergraduate module *"Calcolo automatico"* (Algorithms). Uni-2/1995 versità di Trento (20 hours).

PhD Student supervision

- 1/11/2012- PhD co-supervisor (together with Marco Rospocher) of Giulio Petrucci. Current PhD project current title: "Extracting expressive ontologies from text".
- 1/11/2011- PhD co-supervisor (together with Nicola Guarino) of Alessander Botti Benevides. Current current PhD project title: "Combining ontological and process-based reasoning".
- 1/11/2010- PhD supervisor of Tahir Khan. Title of the thesis: "Involving Domain Experts in the
 4/2014 construction of OWL ontologies: experience oriented and tool base support for template based modelling and knowledge reuse".
 - 9/2001 PhD co-supervisor (together with Michael Fisher) of Benjamin Hirsh. PhD project title: 4/2003 "Programming Rational Agents".
 - 9/2002 PhD co-supervision (together with Michael Fisher) of Nivea de Carvalho Ferreira. PhD 4/2003 project title: "Programming agents dealing with uncertain information".