

Curriculum vitae

Chiara Renso

Anagraphical data

Chiara Renso

Born in Verona, Italy, 17 October 1968

Since 2000 she is a researcher at National Research Council (CNR), at ISTI Institute in Pisa, Italy

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1 Education

- Master Degree in Computer Science at l'University of Pisa, 9 October 1992, vote 108/110.
- PhD in Computer Science at University of Pisa, 12 May 1998. The title of the thesis is "Mechanisms for Semantic Integration of Deductive Databases".

2 Publications

References

2.1 PhD Thesis

- [1] C. Renso. *Mechanisms for Semantic Integration of Deductive Databases*. PhD thesis, Dipartimento di Informatica, Università di Pisa, 1998.

2.2 Journals

- [2] D. Aquilino, P. Asirelli, C. Renso, and F. Turini. Applying restriction constraint to deductive databases. *Annals of Mathematics and Artificial Intelligence*, 19:3–25, 1997.
- [3] C. Renso and S. Ruggieri. A Mediator Approach for Representing Knowledge Intelligent Multimedia Presentation Systems. *Human Computer Interaction Letters*, 1 (1): 32-38, April 1998.
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- [10] Roberto Trasarti, Fosca Giannotti, Mirco Nanni, Dino Pedreschi, Chiara Renso. A Query Language for Mobility Data Mining *International Journal of Data Warehousing and Mining (IJDWM)* Vol. 7 Number 1, January 2011.

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- [12] Fosca Giannotti, Mirco Nanni, Dino Pedreschi, Fabio Pinelli, Chiara Renso, Salvatore Rinzivillo, Roberto Trasarti Unveiling the complexity of human mobility by querying and mining massive trajectory data *The VLDB Journal*, volume 20, number 5, 2011, pages 695-719
- [13] Alisson Loy, Vania Bogorny, Chiara Renso, Luis Otavio Alvares An algorithm to identify avoidance behavior in moving object trajectories *Journal of the Brazilian Computer Society*. 17(3): 193-203 (2011).
- [14] Anna Monreale, Roberto Trasarti, Dino Pedreschi, Chiara Renso, Vania Bogorny Data privacy for the semantic trajectories of human mobility *Transactions on Data Privacy*. 4(2): 73-101 (2011).
- [15] Chiara Renso; Miriam Baglioni; Jose Macedo; Roberto Trasarti; Monica Wachowicz How you move reveals who you are: understanding people's behavior by analyzing trajectory data Accepted for Publication at KAIS - Knowledge and Information Systems Journal Special issue on Behavior Computing. To appear.

2.3 Journal Editor

- [16] Chiara Renso, Vania Bogorny, Hui Xiong Special issue on "Context-aware data mining (CADM)". *Knowl. Inf. Syst.* 28(2): 249-250 (2011)

2.4 Book Chapters

- [17] M. Nanni, A. Raffaetà, C. Renso, F. Turini A declarative framework for reasoning on spatio-temporal data Book chapter in *Spatio-temporal databases, flexible querying and reasoning*, R. de Caluwe, G. de Tr, G. Bordogna editors, Physica Verlag 2004.
- [18] H. Hosni, M.V. Masserotti, C. Renso Maximum Entropy Reasoning for GIS in Flexible Databases supporting Imprecision and Uncertainty, Physica Verlag, June 2006
- [19] Monica Wachowicz, Arend Ligtenberg, Chiara Renso, and Seda Gurses Characterising the next generation of mobile applications through a privacy-aware geographic knowledge discovery process in *Mobility, Privacy, and Geography: a Knowledge Discovery vision*, A Springer LNCS Monograph Fosca Giannotti and Dino Pedreschi, Editors, January 2008

- [20] Chiara Renso, Simone Puntoni, Elias Frenzos, Andrea Mazzoni, Bart Moe-lans, Nikos Pelekis, Fabrizio Pini Wireless Network Data Sources: Track-ing and Synthesizing Trajectories in Mobility, Privacy, and Geography: a Knowledge Discovery vision, A Springer LNCS Monograph Fosca Giannotti and Dino Pedreschi, Editors, January 2008
- [21] G. Manco, M. Baglioni, F. Giannotti, B. Kujpers, A. Raffaetà, C. Renso Querying and Reasoning for Spatio-Temporal Data Mining in Mobility, Privacy, and Geography: a Knowledge Discovery vision, A Springer LNCS Monograph Fosca Giannotti and Dino Pedreschi, Editors, January 2008
- [22] Monica Wachowicz, Jose Macedo, Chiara Renso, and Arend Ligtenberg The role of a multi-tier ontological framework in reasoning to discover meaningful patterns of sustainable mobility Geographic Data Mining and Knowledge Discovery, H. Miller and J. Han Editors, 2nd Edition, Taylor and Francis, 2009
- [23] Daniel Ornellana, Chiara Renso Developing a Spatial Knowledge Repre-sentation for Pedestrian Interactions Movement-aware Applications for Sus-tainable Mobility: Technologies and Approaches, Monica Wachowicz Editor, IGI Publisher, 2010.

2.5 Peer Reviewed Conferences and Workshops

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- [25] Domenico Aquilino, Patrizia Asirelli, Chiara Renso, Franco Turini An Operator for Composing Deductive Databases with Theories of Constraints Logic Programming and Nonmonotonic Reasoning, Third International Con-ference Lecture Notes in Computer Science vol 928, 1995, pages 57-70
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- [27] P. Asirelli, C. Renso, and F. Turini. Language Extensions for Semantic Integration of Deductive Databases. In *Proceedings of the International Workshop on Logic in Databases*, volume 1154 of *Lecture Notes in Computer Science*, pages 415–434, 1996.
- [28] A. Brogi, C. Renso, and F. Turini. Amalgamating Language and Met-alanguage for Composing Logic Programs. In *Proceedings of the GULP-PRODE'94 Joint Conference on Declarative Programming*, volume 2, pages 408–422, 1994.

- [29] C. Renso. Danilo Montesi and F. Turini. Using temporary integrity constraints to optimize databases. In *Proceedings of Formal and Applied Practical Reasoning 96*, 1996.
- [30] C. Renso. P. Asirelli. The constraint operator in the medlan language. In *Compulog Network area Constraint Programming and ERCIM Working Group on Constraints, Joint Workshop, in conjunction with the CP97 Conference*, 1997. Linz, Austria, October 27-28.
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- [46] Roberto Bartolini, Caterina Caracciolo, Emiliano Giovannetti, Alessandro Lenci, Simone Marchi, Vito Pirrelli, Chiara Renso, Laura Spinsanti Creation and Use of Lexicons and Ontologies for Natural Language Interface to Databases LREC 2006 Conference
- [47] Maurizio BOMBARA, Davide CALI, Ivana CALI, Emiliano GIOVANNETTI, Maria Vittoria MASSEROTTI, Chiara RENSO, Laura SPINSANTI, Giuseppe TROPEA Interrogazioni in linguaggio naturale a basi dati eterogenee: l'ontologia del sistema "FuLL" nei GIS Accettato alla conferenza: Informazione Geografica: Data Harmonisation, Interoperabilita e Standard, Reti e Facilities Management, Ubiquitous GIS, Roma 21-22 settembre 2006
- [48] M. Bombara, D. Cali, I. Cali, V. Cartelli, E. Giovannetti, M. Masserotti, C. Renso, L. Spinanti, G. Tropea TECNOLOGIE OPEN-SOURCE NEL PROGETTO FULL (FUZZY LOGIC AND LANGUAGE) convegno Grass & GFOSS meeting, palermo, 2007.
- [49] M. Baglioni, M.V. Masserotti, C. Renso, L. Spinsanti Building Geospatial Ontologies from Geographical Databases GeoS 2007, Mexico City LNCS, Vol. 4853.
- [50] R. Ortale, E. Ritacco, N. Pelekis, R. Trasarti, G. Costa, F. Giannotti, G. Manco, C. Renso, Y. Theodoridis DAEDALUS: A knowledge discovery analysis framework for movement data SEBD 2008, Palermo, Italy.
- [51] M. Baglioni, J. Macedo, C. Renso, M. Wachowicz An ontology-based approach for the semantic modelling and reasoning on trajectories SeCOGIS 2008, Barcelona, Spain LNCS Vol. N. 5232.
- [52] Monica Wachowicz, Daniel Orellana, Chiara Renso, Estefania Muoz Moraga, and Javier Parada The spatial knowledge representation of players movement in mobile outdoor gaming The Fourth International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas, Montecatini Terme, october 2008.

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- [54] M.Baglioni, E. Giovannetti, M.V. Masserotti, C. Renso, L. Spinsanti Ontology-driven querying of geographical databases Terra Cognita 2008, Workshop in conjunction with ISWC, October 2008.
- [55] M. Baglioni, J.Macedo, C. Renso, R.Trasarti, M. Wachowicz Towards Semantic Interpretation of Movement Behavior Agile 2009, Lecture Notes in Geoinformation and Cartography, Hamburg, Germany.
- [56] M. Baglioni, C. Renso, R.Trasarti, DAMSEL: a System for Progressive Querying and Reasoning on Movement Data FlexDBIST Workshop, DEXA 2009, august 31, September 4, Linz, Austria, IEEE
- [57] Fosca Giannotti, Chiara Renso, Roberto Trasarti GeoPKDD Geographic Privacy-aware Knowledge Discovery, FET 2009. The European Future Technologies Conference
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- [59] Fosca Giannotti, Mirco Nanni, Dino Pedreschi, Chiara Renso, Roberto Trasarti. Mining Mobility Patterns from Trajectory Data Workshop on Social Computing with Mobile Phones & Sensors: Modeling, Sensing and Sharing (SCMPS09) joint with IEEE Social Comm 2009
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- [61] R. Ong, M. Nanni, C. Renso, M. Wachowicz On flock patterns in pedestrian movement Invited Session of Spatiotemporal Pattern Discovery and Data Mining in IGARSS 2010
- [62] Roberto Trasarti, Salvatore Rinzivillo, Fabio Pinelli, Mirco Nanni, Anna Monreale, Chiara Renso, Dino Pedreschi, Fosca Giannotti Exploring Real Mobility Data with M-Atlas ECML/PKDD (3) 2010: 624-627
- [63] Laura Spinsanti, Fabrizio Celli, Chiara Renso Where you go is who you are: understanding people's activities by places visited Proceedings of the Workshop on Behaviour Monitoring and Interpretation BMI 2010.
- [64] Fosca Giannotti, Mirco Nanni, Dino Pedreschi, Fabio Pinelli, Chiara Renso, Salvatore Rinzivillo, Roberto Trasarti Mobility data mining: discovering movement patterns from trajectory data CTS workshop at ACMGIS 2010, San Jose, California, USA, November 2010.

- [65] Anna Monreale, Roberto Trasarti, Chiara Renso, Dino Pedreschi and Vania Bogorny Preserving Privacy in Semantic-Rich Trajectories of Human Mobility SPRINGL 2010, 3rd ACM SIGSPATIAL International Workshop on Security and Privacy in GIS and LBS, November 2, 2010, San Jose, California, USA
- [66] Rebecca Ong, Chiara Renso, Mirco Nanni, and Monica Wachowicz From Pattern Discovery to Pattern Interpretation in Movement Data Third international workshop on Semantic Aspects of Data Mining, SADM 2010, in conjunction with ICDM 2010, Sydney, Australia, December 2010.
- [67] Bruno Neiva Moreno, Valeria Cesario Times, Chiara Renso, Vania Bogorny. Looking Inside the Stops GEOINFO 2010
- [68] Alisson Moscato Loy, Vania Bogorny, Chiara Renso, Luis Otavio Alvares. Um algoritmo para identificar padres comportamentais do tipo avoidance em trajetrias de objetos mveis, GEOINFO 2010
- [69] M.Bagliioni, M.V.Masserotti, C. Renso, L. Spinsanti Improving geodatabase semantic querying exploiting ontologies GeoS 20011, Brest, LNCS, May 2011.
- [70] Igo Brillhante, Jose Antonio Fernandes de Macedo, Chiara Renso, and Marco Antonio Casanova An Exploration of Trajectory Data using Complex Networks I15th International Database Engineering and Applications Symposium (IDEAS 2011), September 21 - 27, 2011, Lisbon, Portugal. ACM 2011, ISBN 978-1-4503-0627-0
- [71] Rebecca Ong, Fabio Pinelli, Roberto Trasarti, Mirco Nanni, Chiara Renso, Salvatore Rinzivillo, Fosca Giannotti: Traffic Jams Detection Using Flock Mining. ECML/PKDD (3) 2011: 650-653

2.6 Technical Reports

- [72] Patrizia Asirelli, Chiara Renso and Franco Turini Semantic integration of deductive databases. 1996-B4-17-06
- [73] Hykel Hosni, Maria Vittoria Masserotti and Chiara Renso Imperfect information management in GIS: A logical-mathematical approach. 2004-TR-10
- [74] T. Ceccarelli, D. Centeno, F. Giannotti, A. Massolo, C. Parent, A. Raffaetà, C. Renso, S. Spaccapietra, and F. Turini. The behaviour of the Crested Porcupine: the complete case study. ISTI Technical report 2004-TR-37, DeduGIS - European Working Group, 2001.
- [75] Ortale R., Pelekis N., Ritacco E., Trasarti R., Costa G., Giannotti F., Manco G., Renso C., Theodoridis Y. Towards progressive querying and mining movement data. ISTI Technical report

- [76] F. Giannotti, M. Nanni, D. Pedreschi, C. Renso, R. Trasarti. Transforming Trajectory Data into Mobility Knowledge. ISTI technical report.

3 Research Activity

Her research interests are related to spatio-temporal data mining, data mining query languages, semantic data mining. She has been involved in the European Projects DeduGIS, ReviGIS, GeoPKDD (<http://www.geopkdd.eu>), MODAP (<http://www.modap.org>).

In July 2007 visited the data base group of Prof. Spaccapietra at EPFL of Lausanne (Switzerland) where she established a collaboration with J. de Macedo on conceptual modeling, ontologies and data mining.

She as been an Invited talk with Monica Wachowicz at the AMFM 2008 Conference in Rome.

In October - November 2009 she won a Short Term Mobility grant from CNR for visiting for one month Prof. Vania Bogorny at Federal University of Santa Catarina, in Florianopolis, Brazil.

In July 2010 she won a grant from CNPQ (Brazil) for visiting Prof. Macedo at the University of Ceara, Fortaleza, Brazil.

In April 2011 she won a grant from MOVE Cost action to visit University of Pireaus, Greece.

From 2000 to 2009 she held yearly courses of GIS & Web at University of Pisa, Master on GIS. From 2003 to 2010 she hold yearly courses of laboratory of Web Design and PHP at University of Pisa.

She has been advisor or co-advisors of more than 20 master thesis from University of Pisa.

4 European Project Coordination

From March 2012 she is scientific coordinator of the FP7-PEOPLE Marie Curie IRSES project called SEEK <http://www.seek-project.eu>.

5 Tutorials and International Teaching

- in July 2010 she has been invited from University of Ceara' to held a course on Data Mining
- In October 2010 she held a Tutorial with Prof. S. Spaccapietra and E. Zimany on Trajectory Data Representation, Management and Understanding and CIKM 2010, Toronto, Canada.
- In 2011 she has been invited to held a seminar on "Semantic Data Mining" at the University of Pireaus, Greece

- In October 2011 she has been invited to held a tutorial at the Brazilian Conference on Data Base SBBD 2011, Florianopolis, Brazil.

6 Conference and Workshops organization

- In 2001 she has been co-chair with Alessandra Raffaetà of the l Workshop "Complex Reasoning on Geographical Data", Cyprus, 1 December 2001
- since 2004 she is in the program committee of the workshop Supporting Imprecision and Uncertainty in Flexible Databases (SIUFDB-04) and Flexible Database and Information System Technology FlexDBIST
- In 2008, 2009 and 2010 she co-chair with Vania Bogorny and Hui Xiong of workshop SADM - Semantic Aspects of Data Mining in conjunction with IEEE ICDM.
- in 2008 she is local organizer of conference IEEE-ICDM 2008.
- in 2008 she is local chair of workshop Spatio and Spatio Temporal Data Mining in conjunction with IEEE ICDM 2008.
- in 2009 she is co-organizer of the workshop IEEE SADM 2009 - Semantic Aspects of Data Mining , in conjunction with ICDM 2009, Miami, FL, USA.
- in 2010 she is co-organizer of the workshop Workshop on movement research: are you in the flow? held in conjunction with the AGILE 2010 conference
- in 2010 she is co-organizer of the workshop IEEE SADM 2010 - Semantic Aspects of Data Mining , in conjunction with ICDM 2010, Sydney, Australia.

Pisa, March 26, 2012

Chiara Renso