Alessandro **Antonucci**

SENIOR LECTURER-RESEARCHER @ IDSIA-DTI-SUPSI

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Education

University of Milano	*Milan, Italy*
M.SC. DEGREE (*cum laude*) IN PHYSICS	*Mar. 2002*
University of Lugano	*Lugano, Switzerland*
PH.D. IN COMPUTER SCIENCE	*Nov. 2008*
University of Applied Sciences of Southern Switzerland	*Lugano, Switzerland*
TEACHING QUALIFICATION - CERTIFICATE FOR ADVANCED STUDIES IN TEACHING	*Feb. 2020*

Positions

Istituto Dalle Molle di Studi sull'Intelligenza Artificiale (IDSIA)	*Lugano, Switzerland*
RESEARCHER (SENIOR RESEARCHER SINCE 2008, CURRENT POSITION SENIOR LECTURER-RESEARCHER)	*Since Apr. 2003*
University of Applied Sciences and Arts of Southern Switzerland (SUPSI)	*Lugano, Switzerland*
LECTURER (CURRENT POSITION SENIOR LECTURER-RESEARCHER)	*Since Nov. 2006*

Projects

Reinforcement Learning for Tactical Analysis and Optimization	*CHF 235'000*
ARMASUISSE	*2021*
Author of the proposal and project manager.	
From Alpha-Beta to Alpha-Zero: Taking AI-Based Players or the New Techno War to the Next Level	*CHF 100'000*
ARMASUISSE	*2021*
Author of the proposal and project manager.	
Stagend AI Piccoli Eventi	*CHF 20'000*
STAGEND	*2021*
Author of the proposal and project manager.	
Theory and Practice of Structural Learning and Sensitivity Analysis in Probabilistic Circuits	*CHF 49'637*
HASLER STIFTUNG	*2020-2021*
Co-author of the proposal and research coordinator.	
AI-Powered automatic players for New Techno War	*CHF 75'390*
ARMASUISSE	*2020*
Co-author of the proposal and project manager.	
Stage & AI	*CHF 416'346*
INNOSUISSE	*2019*
Author of the proposal and project manager.	
AI4CG: Intelligenza Artificiale per Applicazioni di Corporate Governance	*CHF 422'970*
INNOSUISSE	*2018*
Author of the proposal and project manager.	

CREDO Industrialization   *CHF 54'000*

FUB-ZEO + Armasuisse   *2017*

Co-author of the proposal and project manager.

Adaptive systems for foreign languages teaching   *CHF 94'000*

SUPSI Internal Project   *2015*

Co-author of the proposal, team member and project manager during the final part of the project.

Project CREDO: Decision Support in complex situations   *CHF 90'000 + 45'000*

Armassuisse   *2014*

Co-author of the proposal and project manager.

Newscron: an intelligent system for real-time news clustering and classification   *CHF 279'675*

Commission for Technology and Innovation (CTI)   *2014*

Co-author of the proposal and project manager.

Project CREDO Phase IV: compact CREDO platform / CREDO New, informative decisions   *CHF 97'200 + 54'000*

Armassuisse   *2011*

Co-author of the proposal and project manager.

STAGEND.COM: a web-based platform for the promotion of the independent music business   *CHF 341'400 (IDSIA CHF 184'700)*

Commission for Technology and Innovation (CTI)   *2010*

Project manager.

Project CREDO Phase III: knowledge-based decision support: netzwerke und Imprecise Probability   *CHF 298'400*

Armassuisse   *2008*

Co-author of the proposal and project manager.

Project CREDO Phase II: Sensornetzwerke für Sicherungsoperationen   *CHF 376'600*

Armassuisse   *2007*

Team member.

CREDO: Identifizierun von ubekannten Objekten mittels kredaler Klassifizierung   *CHF 142'400*

Armassuisse   *2006*

Team member.

Investigation on the theory and practice of credal classification   *PhD Grant*

Swiss National Science Foundation (NSF)   *2003*

NSF grant for my four-years Ph.D. research project. Prof. M. Zaffalon was the author of the proposal and supervisor.

Teaching

Numerical Analysis and Optimization   *Bachelor in Data Science and AI, SUPSI*

Since 2020   *Both sememester every year, 6 ECTS*

Numerical Algorithms   *Bachelor in Electrical Engineering and Informatics, SUPSI*

Since 2006   *Both sememester every year, 6 ECTS*

Probability and Statistics, Mathematics   *Faculty of Computer Science, USI*

2005 - 2007   *Teaching Assistant.*

Committees

Chair

WPMISIIP 2013 (VI Workshop on Principles and Methods of Statistical Inference with Interval Probability)

Co-chair

PGM (2016), ISIPTA (2017), ECSQARU (2017), UR@FLAIRS (2019, 2020, 2021), KR-Application Track (2021), UR@ISAIM (2022).

Program Committee Member

AAAI (2015, 2016, 2018, 2020, 2021); AISTATS (2020, 2021, 2022); AMBN (2017); BELIEF (2018, 202); ECAI (2014, 2018); ECML-PKDD (2020, 2021); ECSQARU (2011, 2013, 2015, 2017, 2019, 2021); FUSION (2020); ICLR (2022); IJCAI (2015, 2018, 2019, 2020, 2021); IPMU (2010, 2012, 2014, 2020); ISIPTA (2009, 2011, 2013, 2015, 2017, 2019, 2021); NeurIPS (2018, 2021); PGM (2010, 2012, 2014, 2016, 2018, 2020); SIGIR (2020, 2022); SMPS (2018, 2022); SUM (2019, 2020, 2021); UAI (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2018, 2019, 2020, 2021, 2022).

Journal Reviewer

Annals of Mathematics and Artificial Intelligence, Annals of Operations Research, Artificial Intelligence Journal, Environmental Modelling and Software, Expert Systems with Applications, European Journal of Operational Research, Fuzzy Sets and Systems, Information Fusion, International Journal of Approximate Reasoning, International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, Journal of Artificial Intelligence Research, Journal of Risk and Reliability, Journal of Statistical Theory and Practice, Journal of Systems and Software, Neural Computing and Applications, Neural Processing Letters, Neurocomputing, Pattern Recognition, Reliability Engineering and System Safety.

Awards

2021	**Credit Suisse Award for Best Teaching,** Test a distanza in modalità digitale presso il Bachelor SUPSI-DTI in Informatica – Una (modesta) proposta implementativa"	*Second Prize*
2020	**Third International Workshop on Narrative Extraction from Texts,** Temporal Embeddings and Transformer Models for Narrative Text Understanding (with Vani K and Simone Mellace)	*Best Paper Award*
2018	**Thirty-First International Florida Artificial Intelligence Research Society Conference,** Reliable uncertain evidence modeling in Bayesian networks by credal networks (with Sabina Marchetti)	*Nominated Best Paper*
2016	**Eighth International Conference on Soft Methods in Probability and Statistics,** Technical Gestures Recognition by Set-Valued Hidden Markov Models with Prior Knowledge (with Yann Soullard e Sebastien Destercke)	*IJAR Best Paper Award*
2013	**Twelfth European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty,** Approximating credal network inferences by linear programming (with Cassio P. de Campos, David Huber e Marco Zaffalon)	*Best Paper Award*
2013	**Twenty-nineth Conference on Uncertainty in Artificial Intelligence,** On the complexity of strong and epistemic credal networks (with Denis Deratani Mauà, Cassio P. de Campos and Alessio Benavoli)	*Google Best Student Paper Award*
2009	**Carlo Cattaneo Society,** Un modello matematico per analisi di rischio idrogeologico da colata detritica in Canton Ticino	*Carlo Cattaneo Award*
2009	**Sixth International Symposium on Imprecise Probability: Theories and Application,** Epistemic irrelevance in credal networks: the case of imprecise Markov trees (paper co-authored with Gert de Cooman, Filip Hermans and Marco Zaffalon)	*Best Poster Award*

Students Supervision

Lilith Mattei	Ph.D. Student Supervision, USI, 2020 (since 2019, ongoing).
Nicol Allegra	Master Thesis Supervision, SUPSI, 2021.
	Explainability in Reinforcement Learning by Saliency Maps with Applications to Warfare Simulation.
Simone Mellace	Master Thesis Supervision, SUPSI, 2020.
	NOVEL2GRAPH: Knowledge Graphs and Dynamic Embeddings for Narrative Text Understanding.
Denis Broggini	Master Thesis Co-Supervision, SUPSI, 2020.
	Bayesian Conversational Recommendation System.
Thomas Tiotto	Master Thesis Supervision, USI, 2019.
	Explainable AI with Probabilistic Graphical Models. A Study with Application and Evaluation on a Medical Domain.
Edvin Jonuzoski	Master Thesis Co-Supervision, USI, 2014.
	Adaptive Testing by Bayesian Networks.
Rocco de Rosa	Master Thesis Co-Supervision, Faculty of Informatics, Università degli Studi di Milano, 2011.
	Time series classification by precise and imprecise Markov models with applications in action recognition.
Sandra Gabaglio	Master Thesis Co-Supervision, SUPSI, 2012.
	E-coaching system, approximate reasoning and similarity analysis by Bayesian networks.
Mikol Faro	Master Thesis Co-Supervision, SUPSI, 2012.
	Credal networks decision support system JavaQCredo.
	Renato Geh (M.Sc., University of São Paulo, 2022)
	Martin Plajner (Ph.D., University of Prague, 2021)
External Examiner	Angela McCourt (Ph.D., Trinity College Dublin, 2019)
	Rafael Cabañas (Ph.D., University of Granada, 2017)
	Gen Yang (Ph.D., University of Compiegne, 2016).

Edited Books and Journal Issues

Annals of Mathematics and Artificial Intelligence (Springer). Volume 89, Issue 10-11, Special Issue on Uncertain Reasoning.

ANTONUCCI, ALESSANDRO AND SALEM, BENFERHAT AND KAMAL, PREMARATNE (EDITORS)

2021

International Journal of Approximate Reasoning (Elsevier). Virtual Special Issue on the Eighth Edition of the International Conference on Probabilistic Graphical Models (PGM 2016).

CORANI, GIORGIO AND ANTONUCCI, ALESSANDRO AND DE CAMPOS, CASSIO (EDITORS)

2018

International Journal of Approximate Reasoning (Elsevier). Volume 105. Special Issue on Tenth International Symposium on Imprecise Probability: Theories and Applications (ISIPTA '17).

ANTONUCCI, ALESSANDRO AND CORANI, GIORGIO AND COUSO, INÉS AND DESTERCKE, SÉBASTIEN (EDITORS

2017

International Journal of Approximate Reasoning (Elsevier), Volume 99. Special Issue on the 14th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU 2017).

ANTONUCCI, ALESSANDRO AND CHOLVY, LAURENCE ANND PAPINI, ODILE (EDITORS)

2017

Symbolic and Quantitative Approaches to Reasoning with Uncertainty (Proceedings of the 14th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty). Lecture Notes in Artificial Intelligence, volume 10369. Springer.

ANTONUCCI, ALESSANDRO AND CHOLVY, LAURENCE ANND PAPINI, ODILE (EDITORS)

2017

ISIPTA '17: Proceedings of the Tenth International Symposium on Imprecise Probability: Theories and Applications. Volume 62 of the JMLR Workshop and Conference Proceedings. PMLR.

ANTONUCCI, ALESSANDRO AND CORANI, GIORGIO AND COUSO, INÉS AND DESTERCKE, SÉBASTIEN (EDITORS)

2017

PGM 2016: Proceedings of the Eighth International Conference on Probabilistic Graphical Models. Volume 52 of the JMLR Workshop and Conference Proceedings. PMLR.

ANTONUCCI, ALESSANDRO AND CORANI, GIORGIO AND DE CAMPOS, CASSIO POLPO (EDITORS)

2016

Publications

- Causal Expectation-Maximisation. Zaffalon, Marco and Antonucci, Alessandro and Cabañas, Rafael (2021). In WHY-21 Workshop (@ NeurIPS 2021). Virtual Event , Dec 13, 2021.
- Structural Learning of Probabilistic Sentential Decision Diagrams under Partial Closed-World Assumption. Antonucci, Alessandro and Facchini, Alessandro and Mattei, Lilith (2021). In The Fourth Tractable Probabilistic Modelling Workshop (@ UAI 2021). Virtual Event , Jul 30, 2021.
- ADAPQUEST: A Software for Web-Based Adaptive Questionnaires based on Bayesian Networks. Bonesana, Claudio and Mangili, Francesca and Antonucci, Alessandro (2021). In AI4EDU: Artificial Intelligence For Education (@ IJCAI2021). Virtual Event , Aug 20, 2021.
- CREPO: An Open Repository to Benchmark Credal Network Algorithms Cabañas, Rafael and Antonucci, Alessandro (2021). In De Bock, J. and Cano, A. and Miranda, E. and Moral, S. (Eds), International Symposium on Imprecise Probabilities: Theories and Applications (ISIPTA-2021). Grenada (Spain) , Jul 6-9, 2021. 147 , JMLR.org , 352–356 .
- A New score for Adaptive Tests in Bayesian and Credal Networks. Antonucci, Alessandro and Mangili, Francesca and Bonesana, Claudio and Adorni, Giorgia (2021). In Vejnarová, J. and Wilson, N. (Eds), Symbolic and Quantitative Approaches to Reasoning With Uncertainty. Cham . Springer International Publishing , 399–412 .
- Relation Clustering in Narrative Knowledge Graphs. Mellace, Simone and Kanjirangat, Vani and Antonucci, Alessandro (2021). In AI4Narratives Workshop at 29th International Joint Conference on Artificial Intelligence and the 17th Pacific Rim International Conference on Artificial Intelligence (IJCAI-PRICAI 20). .
- Robust Model Checking with Imprecise Markov Reward Models Termine, Alberto and Antonucci, Alessandro and Facchini, Alessandro and Primiero, Giuseppe (2021). In Proceedings of the Twelfth International Symposium on Imprecise Probabilities: Theories and Applications (ISIPTA '21). Granada , Jul 6-9, 2021. Proceedings of Machine Learning Research 147 , PMLR , 299–309 .
- Logic and Model Checking by imprecise Probabilistic Interpreted Systems Termine, Alberto and Antonucci, Alessandro and Primiero, Giuseppe and Facchini, Alessandro (2021). In Rosenfeld, A. and Talmon, N. (Eds), Multi-Agent Systems. EUMAS 2021. Lecture Notes in Computer Science. Cham .
- Cautious Classification with Data Missing not at Random using Generative Random Forests Llerena, Julissa V. and Mauá, Denis. D. and Antonucci, Alessandro (2021). In Vejnarová, J. and Wilson, N. (Eds), Symbolic and Quantitative Approaches to Reasoning With Uncertainty. Cham . Springer International Publishing , 284–298 .
- Antonucci, Alessandro, and Tiotto, Thomas. Approximate MMAP by marginal search. In FLAIRS-33: Proceedings of the 33rd International Florida Artificial Intelligence Research Society Conference (2020), K. W. Brawner, R. Barták, and E. Bell, Eds., AAAI Press.
- Mangili, Francesca, Broggini, Denis, Antonucci, Alessandro, Alberti, Marco, and Cimasoni, Lorenzo. A Bayesian approach to conversational recommendation systems. In AAAI 2020 Workshop on Interactive and Conversational Recommendation Systems (WICRS) (2020).
- Vani K, Simone Mellace, Alessandro Antonucci (2020). Temporal embeddings and transformer models for narrative text understanding. Third International Workshop on Narrative Extraction from Texts (Text2Story 2020), 42nd European Conference on Information Retrieval.
- Volpetti, Claudia and K, Vani and Antonucci, Alessandro (2020). *Temporal word embeddings for narrative understanding*. In ICMLC 2020: Proceedings of the Twelfth International Conference on Machine Learning and Computing. Shenzhen, China, Feb 15-17 2020. ACM.
- Mattei, Lilith, Soares, Decio L., Antonucci, Alessandro, Mauà, Deratani Denis, Facchini, Alessandro (2019). Exploring the space of probabilistic sentential decision diagrams. In Proceedings of the 3rd Tractable Probabilistic Modeling Workshop, 36th International Conference on Machine Learning.
- Antonucci, A., Facchini, A., Mattei, L. (2019). Credal sentential decision diagrams. In Proceedings of the Eleventh International Symposium on Imprecise Probability: Theories and Applications (ISIPTA '19).

- Antonucci, Alessandro (2019). Reliable discretisation of deterministic equations in Bayesian networks. In Barták, Roman and Brawner, Keith W. (Eds), FLAIRS-32: Proceedings of the Thirty-Second International Florida Artificial Intelligence Research Society Conference. Sarasota, Florida, USA, May 19-22 2019. AAAI Press.
- Antonucci, Alessandro (2018). Modeling Deterministic Equations in Discrete Bayesian Networks by Credal Networks. J. Phys.: Conf. Ser. 1065.
- Marchetti, Sabina and Antonucci, Alessandro (2018). Reliable uncertain evidence modeling in Bayesian networks by credal networks. In Brawner, Keith W. and Rus, Vasile (Eds), FLAIRS-31: Proceedings of the Thirty-First International Florida Artificial Intelligence Research Society Conference. Melbourne, Florida, USA, May 21-23 2018. AAAI Press.
- Marchetti, Sabina and Antonucci, Alessandro (2018). Imaginary kinematics. In Globerson, Amir and Silva, Ricardo (Eds), UAI 2018: Proceedings of the Thirty-Fourth Conference on Uncertainty in Artificial Intelligence. Monterey, California, USA, Aug 6-10 2018. AUAI Press.
- Antonucci, Alessandro and Facchini, Alessandro and Mattei, Lilith (2019). Credal sentential decision diagrams. In De Bock, Jasper and de Campos, Cassio Polpo and de Cooman, Gert and Quaeghebeur, Erik and Wheeler, Gregory (Eds), ISIPTA '19: Proceedings of the Eleventh International Symposium on Imprecise Probabilities: Theories and Applications. Ghent, Belgium, Jul 3-6 2019. Proceedings of Machine Learning Research 103, PMLR, 14–22.
- Antonucci, Alessandro and Facchini, Alessandro (2018). A credal extension of independent choice logic. In Ciucci, Davide and Pasi, Gabriella and Vantaggi, Barbara (Eds), Scalable Uncertainty Management (SUM 2018: Proceedings of the Twelfth International Conference on Scalable Uncertainty Management). Milan, Italy, Oct 3-5 2018. Lecture Notes in Artificial Intelligence 11142, Springer, Cham, 35–49.
- Antonucci, Alessandro and Facchini, Alessandro (2018). Set-valued probabilistic sentential decision diagrams. In Bellodi, Elena and Schrijvers, Tom (Eds), Proceedings of the 5th Workshop on Probabilistic Logic Programming co-located with the 28th International Conference on Inductive Logic Programming (ILP 2018). Ferrara, Italy, Sep 1 2018. CEUR Workshop Proceedings.
- Mattei, Lilith and Soares, Décio L. and Antonucci, Alessandro and Mauà, Denis Deratani and Facchini, Alessandro (2019). Exploring the space of probabilistic sentential decision diagrams. In Proceedings of the third Tractable Probabilistic Modeling Workshop, 36th International Conference on Machine Learning, June 2019. Long Beach, California, USA, Jun 14 2019.
- K, Vani and Antonucci, Alessandro (2019). NOVEL2GRAPH: Visual summaries of narrative text enhanced by machine learning. In Alípio, Mário Jorge and Ricardo, Campos and Adam, Jatowt and Sumit, Bhatia (Eds), Proceedings of Text2Story - Second Workshop on Narrative Extraction From Texts co-located with 41th European Conference on Information Retrieval (ECIR 2019). Cologne, Germany, Apr 14 2019. CEUR Workshop Proceedings.
- Mangili, Francesca and Bonesana, Claudio and Antonucci, Alessandro and Zaffalon, Marco and Rubegni, Elisa and Addimando, Loredana (2016). Adaptive testing by Bayesian networks with application to language assessment. In Micarelli, Alessandro and Stamper, John and Panourgia, Kitty (Eds), ITS 2016: Intelligent Tutoring Systems: 13th International Conference. Zagreb, Croatia, Jun 7-10 2016.
- Antonucci, Alessandro and Corani, Giorgio (2017). The multilabel naive credal classifier. International Journal of Approximate Reasoning. 83 , 320–336.
- Cabañas, Rafael and Antonucci, Alessandro and Cano, Andrés and Gómez-Olmedo, Manuel (2017). Evaluating interval-valued influence diagrams. International Journal of Approximate Reasoning. 80 , 393–411.
- Soullard, Yann and Antonucci, Alessandro and Destercke, Sebastien (2016). Technical gestures recognition by set-valued hidden Markov models with prior knowledge. In Ferraro, Maria Brigida and Giordani, Paolo and Vantaggi, Barbara and Gagolewski, Marek and Gil, María Ángeles and Grzegorzewski, Przemysław and Hryniewicz, Olgierd (Eds), Soft Methods for Data Science (SMPS 2016: Proceedings of the Eight International Conference on Soft Methods in Probability and Statistics). Rome, Italy, Sep 12-14 2016. Advances in Intelligent Systems and Computing 456, Springer, 455–462.
- de Campos, Cassio Polpo and Antonucci, Alessandro (2015). Imprecision in Machine Learning and AI. The IEEE Intelligent Informatics Bulletin. 16 (1), 20–23.
- Antonucci, Alessandro and Scanagatta, Mauro and Mauá, Denis Deratani and de Campos, Cassio Polpo (2015). Early classification of time series by hidden Markov models with set-valued parameters. In Proceedings of the NIPS Time Series Workshop 2015. Montréal, Canada, Dec 11, 2015.
- Mauá, Denis Deratani and Antonucci, Alessandro and de Campos, Cassio Polpo (2016). Hidden Markov models with set-valued parameters. Neurocomputing. 180 , 94–107.
- Antonucci, Alessandro and Corani, Giorgio (2015). The multilabel naive credal classifier. In Augustin, Thomas and Doria, Serena and Miranda, Enrique and Quaeghebeur, Erik (Eds), ISIPTA '15: Proceedings of the Ninth International Symposium on Imprecise Probability: Theories and Applications. Pescara, Italy, Jul 20-24 2015. SIPTA.

- Cabañas, Rafael and Antonucci, Alessandro and Cano, Andrés and Gómez-Olmedo, Manuel (2015). Variable elimination for interval-valued influence diagrams. In Destercke, Sébastien and Denoeux, Thierry (Eds), ECSQARU 2013: Proceedings of the 13th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty. Compiègne, France, Jul 15-17 2015. Lecture Notes in Artificial Intelligence 9161, Springer, Cham, 541–551.
- De Bock, Jasper and de Campos, Cassio Polpo and Antonucci, Alessandro (2014). Global sensitivity analysis for MAP inference in graphical models. In Advances in Neural Information Processing Systems 27 (NIPS 2014). Montréal, Canada, Dec 8-13 2014.
- Corani, Giorgio and Antonucci, Alessandro and Mauá, Denis Deratani and Gabaglio, Sandra (2014). Trading off speed and accuracy in multilabel classification. In van der Gaag, Linda C. and Feelders, Ad (Eds), PGM '14: Proceedings of the Seventh European Workshop on Probabilistic Graphical Models. Utrecht, The Netherlands, Sep 17-19 2014. Springer.
- Mauá, Denis Deratani and de Campos, Cassio Polpo and Benavoli, Alessio and Antonucci, Alessandro (2014). Probabilistic inference in credal networks: new complexity results. Journal of Artificial Intelligence Research. 50 , 603–637.
- Antonucci, Alessandro and de Campos, Cassio Polpo and Huber, David and Zaffalon, Marco (2015). Approximate credal network updating by linear programming with applications to decision making. International Journal of Approximate Reasoning. 58 , 25–38.
- Mauá, Denis Deratani and de Campos, Cassio Polpo and Antonucci, Alessandro (2014). Hidden Markov models with imprecisely specified parameters. In BRACIS 2014: Proceedings of the Brazilian Conference on Intelligent Systems. São Carlos, São Paulo, Brazil, Oct 18-23 2014.
- Antonucci, Alessandro and de Rosa, Rocco and Giusti, Alessandro and Cuzzolin, Fabio (2015). Robust classification of multivariate time series by imprecise hidden Markov models. International Journal of Approximate Reasoning. 56 (B), 249–263.
- Antonucci, Alessandro and Karlsson, Alexander and Sundgren, David (2014). Decision making with hierarchical credal sets. In Laurent, A. and Strauss, O. and Bouchon-Meunier, B. and Yager, R.R. (Eds), Information Processing and Management of Uncertainty in Knowledge-Based Systems. Montpellier, France, Jul 15-19 2014. Springer.
- Antonucci, Alessandro and de Campos, Cassio Polpo and Huber, David and Zaffalon, Marco (2013). Approximating credal network inferences by linear programming. In van der Gaag, Linda C. (Eds), Proceedings of the 12th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty. Utrecht, The Netherlands, Jul 7-10 2013. Springer.
- Antonucci, Alessandro and de Rosa, Rocco and Giusti, Alessandro and Cuzzolin, Fabio (2013). Temporal data classification by imprecise dynamical models. In Cozman, Fabio Gagliardi and Denoeux, T. and Destercke, Sebastien and Seidenfeld, Teddy (Eds), ISIPTA '13: Proceedings of the Eighth International Symposium on Imprecise Probability: Theories and Applications. Compiègne, France, Jul 2-5 2013. SIPTA.
- Antonucci, Alessandro and Huber, David and Zaffalon, Marco and Luginbühl, Philippe and Chapman, Ian and Ladouceur, Richard (2013). CREDO: a military decision-support system based on credal networks. In Proceedings of the 16th Conference on Information Fusion (FUSION 2013). Istanbul, Turkey, Jul 9-12 2013.
- Antonucci, Alessandro and Corani, Giorgio and Mauá, Denis Deratani and Gabaglio, Sandra (2013). An Ensemble of Bayesian Networks for Multilabel Classification. In Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI-13). Beijing, China, Aug 3-9 2013.
- Mauá, Denis Deratani and de Campos, Cassio Polpo and Benavoli, Alessio and Antonucci, Alessandro (2013). On the Complexity of Strong and Epistemic Credal Networks. In Nicholson, Ann and Smyth, Padhraic (Eds), Proceedings of the 29th Conference on Uncertainty in Artificial Intelligence. Bellevue, Washington, Jul 11-15 2013.
- Antonucci, Alessandro (2012). An Interval-Valued Dissimilarity Measure for Belief Functions Based on Credal Semantics. In Denoeux, T. and M.H., Masson (Eds), Belief Functions: Theory and Applications - Proceedings of the 2nd International Conference on Belief Functions. Compiègne, France, 9-11 May 2012. Springer.
- Antonucci, Alessandro (2011). The Imprecise Noisy-OR Gate. In FUSION 2011: Proceedings of the 14th International Conference on Information Fusion. Chicago, Illinois, USA, Jul 5-8 2011. IEEE.
- Antonucci, Alessandro (2008). Imprecise Probabilistic Graphical Models: Equivalent Representations, Inference Algorithms and Applications. Ph.D. Thesis, Università della Svizzera Italiana.
- Antonucci, Alessandro and Benavoli, Alessio and Zaffalon, Marco and de Cooman, Gert and Hermans, Filip (2009). Multiple model tracking by imprecise Markov trees. In FUSION 2009: Proceedings of the 12th International Conference on Information Fusion. Seattle, Washington, USA, Jul 6-9 2009. IEEE.
- Antonucci, Alessandro and Brühlmann, Ralph and Piatti, Alberto and Zaffalon, Marco (2007). Credal networks for military identification problems. In de Cooman, Gert and Vejnarová, Jirina and Zaffalon, Marco (Eds), ISIPTA

'07: Proceedings of the fifth International Symposium on on Imprecise Probability: Theories and Applications. Prague, Czech Republic, Jul 16-19 2007. Action M Agency.

- Antonucci, Alessandro and Brühlmann, Ralph and Piatti, Alberto and Zaffalon, Marco (2009). Credal networks for military identification problems. International Journal of Approximate Reasoning. 50 (2), 666–679.

- Antonucci, Alessandro and de Campos, Cassio Polpo (2011). Decision Making by Credal Nets. In Proceedings of the International Conference on Intelligent Human-Machine Systems and Cybernetics (IHMSC 2011). Hangzhou, China, Aug 26-27 2011. IEEE.

- Antonucci, Alessandro and Cattaneo, Marco and Corani, Giorgio (2012). Likelihood-Based Robust Classification with Bayesian Networks. In Greco, Salvatore and Bouchon-Meunier, Bernadette and Coletti, Giulianella and Fedrizzi, Mario and Matarazzo, Benedetto and Yager, Ronald R. (Eds), Advances in Computational Intelligence. Catania, Italy, Jul 9-13, 2012. Communications in Computer and Information Science 299, Springer, 491–500.

- Antonucci, Alessandro and Cattaneo, Marco and Corani, Giorgio (2011). Likelihood-Based Naive Hierarchical Credal Classifier. In ISIPTA '11: Proceedings of the seventh International Symposium on Imprecise Probability: Theories and Applications. Innsbruck, Austria, Jul 25-28 2011. SIPTA.

- Antonucci, Alessandro and Corani, Giorgio and Gabaglio, Sandra (2012). Active Learning by the Naive Credal Classifier. In Cano, A. and Gómez-Olmedo, M. and Nielsen, T.D. (Eds), Proceeding of the sixth European Workshop on Probabilistic Graphical Models (PGM 2012). Granada, Spain, Sep 19-21 2012.

- Antonucci, Alessandro and Cuzzolin, Fabio (2010). Credal Sets Approximation by Lower Probabilities: Application to Credal Networks. In Hüllermeier, E. and Kruse, R. and Hoffmann, F. (Eds), Computational Intelligence for Knowledge-Based Systems Design, 13th International Conference on Information Processing and Management of Uncertainty, IPMU 2010. Dortmund, Germany, Jun 28 - Jul 2 2010. Springer.

- Antonucci, Alessandro and Piatti, Alberto (2009). Modeling unreliable observations in Bayesian networks by credal networks. In Godo, L. and Pugliese, A. (Eds), Scalable Uncertainty Management, Third International Conference, SUM 2009. Washington, D.C., USA, Sep 28-30 2009. Springer.

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