

# Bruno Zanuttini's Vitæ\*

Associate professor (“maître de conférences”)  
University of Caen, France  
Department of Computer Science and Mathematics, GREYC laboratory

March 29, 2018

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**N.B.** In the whole document, “Unicaen” means “Université de Caen Normandie” (University of Caen, formerly “Université de Caen Basse-Normandie”), and “Normandie Université” is the federation of Higher Education schools of which it is part.

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\*A constantly up-to-date version of this document is available at <http://zanuttini.users.greyc.fr/cv?lg=en>.

## 1 General information

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**Last name, given names**

Zanuttini, Bruno Léonce Amelio

**Born**

February 17th, 1978 in Dijon (France)

**Nationality**

French

**Family**

married, two children (born in 2008 and 2011)

## 2 Contact information

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**Postal address**

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GREYC, Campus 2  
Université de Caen Normandie  
Boulevard du Maréchal Juin  
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14 032 Caen Cedex 5  
France

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Campus 2, building “Sciences 3”, 3rd floor, office #384

**Phone number**

+33 2 31 56 74 84

**Fax number**

+33 2 31 56 73 30

**Email address**

bruno.zanuttini@unicaen.fr

## 3 Professional experience

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**2000–2003**

PhD student in Computer Science at Unicaen (national grant)

**2003–2004**

Temporary research and teaching assistant, department of Computer Science, GREYC laboratory

**Since September, 2004**

associate professor (French “maître de conférences”), Unicaen, Department of Mathematics and Computer Science, GREYC laboratory

**September, 2010–January, 2012**

“detached to CNRS” (no teaching duties)

**Since June, 2011**

holder of the “habilitation à diriger des recherches” in computer science (habilitation: French diploma enabling one to supervise PhD theses)

## 4 Education

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**1998**

licence in Mathematics, Unicaen

**1999**

licence in Computer Science and 1st year of master in Pure Mathematics, Unicaen

**2000**

master in Artificial Intelligence and Algorithmics, Unicaen

**2003**

PhD in Computer Science, Unicaen

thesis title: “Knowledge acquisition and reasoning in propositional logic”

supervised by Jean-Jacques Hébrard and Étienne Grandjean

reviewers: Miki Hermann, Pierre Marquis, and Victor Vianu

examiner: Michel Chein

**2011**

habilitation, Unicaen

thesis title: “Computational Aspects of Learning, Reasoning, and Deciding”

reviewers: Craig Boutilier, Peter Jonsson, and Michèle Sebag

examiners: Jérôme Lang, Abdel-illah Mouaddib, and Patrice Perny

## 5 Administrative charges

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**2005–2016**

animator of the weekly internal workshop of the MAD group in GREYC

**2006–2012**

cohead (with Brigitte Vallée) of master AMI (“Algorithms and Information Models”)

**January, 2007–August, 2008**

elected member of the committee for assistant professor positions, Unicaen

**November, 2007–November, 2016**

elected member of the council of the department of Computer Science, Unicaen

**March, 2008–December, 2010**

elected member of the council of the GREYC laboratory, Unicaen

**May, 2009**

member of two committees for assistant professor positions, LRI, Paris Sud/Orsay University

**May, 2010**

member of two committees for assistant professor positions, GREYC laboratory, Unicaen

**Since January, 2011**

head of research group Models, Agents, Decision (MAD) at the GREYC lab

**September, 2012–August, 2017**

head of master DECIM (“Decision and Optimisation”)

**Since December, 2016**

member of the council of the department of Mathematics and Computer Science, Unicaen

**Since January, 2018**

head of Doctoral School MIIS (“Mathematics, Information, System Engineering”), Normandie Université

## 6 Program committees

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**PC chair (national conferences)**

- RJCIA 2007: Rencontres des Jeunes Chercheurs en Intelligence Artificielle (“National Symposium of Young Researchers in Artificial Intelligence”)
- JIAF 2016, 2017: Journées de l’Intelligence Artificielle Fondamentale (“Conference on Fundamental Artificial Intelligence”)
- JFPDA 2011, 2018: Journées Francophones de Planification, Décision et Apprentissage pour la conduite de systèmes (“French-Speaking Conference on Planning, Decision and Learning for System Control”)

**PC member (international conferences)**

- AI 2007: Australian Joint Conference on Artificial Intelligence
- AAI 2010–2013, 2016–2018: AAI Conference on Artificial Intelligence
- ECAI 2010, 2012, 2014: European Conference on Artificial Intelligence
- IJCAI 2011, 2013: International Joint Conference on Artificial Intelligence
- IJCAI 2015–2018: Senior PC Member

- KR 2012, 2014: International Conference on the Principles of Knowledge Representation and Reasoning
- ICAART 2014, 2016: International Conference on Agents and Artificial Intelligence

**PC member (national conferences)**

- RJCIA 2005, 2009, 2018: Rencontres des Jeunes Chercheurs en Intelligence Artificielle (“National Symposium of Young Researchers in Artificial Intelligence”)
- MajecSTIC 2007: Manifestation des JEunes Chercheurs en Sciences et Technologies de l’Information et de la Communication (“Symposium of Young Researchers in Information and Communication Sciences”)
- JFPC 2009, 2013, 2016: Journées Francophones de Programmation par Contraintes (“French-Speaking Symposium on Constraint Programming”)
- RFIA 2010, 2012, 2014: Reconnaissance des Formes et Intelligence Artificielle (“Pattern Recognition and Artificial Intelligence”)
- CAp 2010: Conférence francophone sur l’Apprentissage artificiel (“French-Speaking Conference on Machine Learning”)
- JFPDA 2011–2018: Journées Francophones de Planification, Décision et Apprentissage pour la conduite de systèmes (“French-Speaking Conference on Planning, Decision and Learning for System Control”)
- JIAF 2014–2018: Journées de l’Intelligence Artificielle Fondamentale (“Conference on Fundamental Artificial Intelligence”)
- CNIA 2016, 2018: Conférence Nationale en Intelligence Artificielle (“National Conference on Artificial Intelligence”)

**Reviewer**

JELIA 2006, CP 2006, IJCAI 2007, STACS 2007, ICTAI 2007, J. AAMAS (2007), ISAIM 2008, AAI 2008, CP 2008, CSL 2008, AIJ (2008, 2012, 2014, 2015), Information Systems (2008), JCSS (2009), CJTCS (2009), AIJ (2008), SAT 2009, ACM ToCL (2009), JAIR (2010, 2011, 2012, 2013, 2014), TCS (2010), JFPDA 2010, JLC (2010), AI Communications (2010), LICS 2011, LICS 2015, KAIS (2011, 2012, 2015), CSL (2013), IEEE Trans. Cybernetics (2013), IJAR (2014, 2015), STACS 2016...

## 7 Research supervision

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**2006/2007**

main supervisor for Sébastien Picant’s PhD, “Application of Formal Verification Algorithms to the Validation of C and SystemC Code” (with industrial society Aeriologic, premature end for economical reasons).

**October, 2008-December, 2011**

supervisor of Boris Lesner’s PhD, “Benefits of Symbolic Reasoning for Representing and Solving Decision Problems” (national grant): publications during the PhD in national conferences JFPDA 2009 and 2010, RJCIA 2009 (best paper award), in national journal RIA (2010), in

ICAPS 2011, and in EWRL 2011. Defence on December 8, 2011 (reviewers Yann Chevaleyre, Olivier Sigaud, examiners Olivier Buffet, Abdel-Allah Mouaddib, Bruno Scherrer).

**October, 2011–February, 2015**

cosupervisor of Damien Bigot’s PhD, “Preference Representation and Learning” (national grant, supervisors H el ene Fargier and J er ome Mengin, IRIT, Toulouse): publications during the PhD at national conferences JIAF 2012 and 2013, JFRB 2014, and at PL@ECAI 2012, UAI 2013, and STAIRS 2014. Defence on February 25th, 2015 (reviewers Patrice Perny, Fr ed eric Koriche, examiners Martin Cooper, J er ome Lang).

**January, 2014–February, 2017**

supervisor of Esther Nicart’s PhD, “Intuitive Feedback in a Man-Machine Collaboration” (industrial contract with Airbus Defence & Space, then Cordon Electronics): publications during the PhD at national conference IC 2015, at UAI 2016, at ICTAI 2016, and in national journal RIA (2017). Defence on February 6th, 2017 (reviewers Danieal Grigori, Marie-H el ene Abdel, examiners Yann Chevaleyre, Arnaud Saval, Bruno Grillh eres).

**Since October, 2015**

supervisor of Florian Benavent’s PhD, “Taking the User’s Recommendations into Account for Intelligent Digital Services” (funded by the “R egion Basse-Normandie”). Publications in national conference JFPDA 2016 and at AAAI 2018.

**Since October, 2016**

supervisor of Christopher Leturc’s PhD, “Incentive mechanisms for fighting against manipulations in reputation systems” (national grant), cosupervisor Gr egory Bonnet.

**September, 2017–August, 2018**

supervisor of Abdelkader Ouali’s post-doc, as part of the PepTraQ project (grant by the “R egion Normandie”).

## 8 Reviewing for PhD and Habilitation Theses

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**2012**

reviewer for Johannes Schmidt’s PhD, “Complexity Classifications for Nonmonotonic Reasoning and Enumeration”, defended at the LIF (Marseilles) on October 16th, 2012

**2012**

reviewer for Mathieu Bonneau’s PhD, “Optimal Adaptive Sampling in Markov Networks, Applications to Sampling of Invasive Species”, defended at the INRA (Toulouse) on November 30th, 2012

**2012**

reviewer for Christophe Rodrigues’ PhD, “Incremental Learning of Relational Action Models”, defended at the LIPN (Paris 13) on January 21st, 2013

**2013**

reviewer for Anaïs Cadilhac’s PhD, “Preference Extraction and Reasoning in Negotiation Dialogues”, defended at the IRIT (Toulouse) on November 29th, 2013

**2015**

reviewer for Nicolas Schmidt’s PhD, “Preference Compilation — Application to Product Configuration”, defended at the CRIL (Lens) on September 17th, 2015

**2016**

reviewer for Pegah Alizadeh’s PhD, “Elicitation and Planning in Markov Decision Processes with Unknown Rewards”, defended at the LIPN (Paris 13) on December 9th, 2016

**2016**

external examiner (reviewer) for Eisa Alanazi’s PhD, “Conditional Preference Networks: Learning and Optimization”, defended at the University of Regina (Canada) on December 12th, 2016

**2016**

reviewer for Samuel Thomas’ PhD, “Knowledge Compilation for Model Counting”, defended at the CRIL (Lens) on December 14th, 2016

**2017**

reviewer for Olivier Buffet’s habilitation, “Sequential Decision Making under Uncertainty: Exploit Structure and Stick to the Framework”, defended at the LORIA (Nancy) on December 18th, 2017

**2018**

reviewer for Lise-Marie Veillon’s PhD, “Collective Artificial Learning: Dynamical and Structural Aspects”, defended at the LIPN (Paris 13) on March 8th, 2018

## 9 Participation in PhD committees

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**2007**

committee member for Élise Bonzon’s PhD, “Modelling of Interactions between Rational Agents: Boolean Games”, defended at the IRIT (Toulouse) on November 13th, 2007

**2008**

committee member for Gauvain Bourgne’s PhD, “Propagation and Refinement of Hypotheses under Communication Constraints”, defended at the LAMSADE (Paris-Dauphine) on March 14th, 2008

**2011**

committee member for Sébastien Picant’s PhD, “Definition of an Operational Model for Dynamic Handling of Exceptions in the Setting of B2B Exchanges without Prior Agreement”, defended at the GREYC (Caen) on March 18th, 2011

**2012**

committee member for Alexandre Niveau’s PhD, “Knowledge Compilation for Online Decision: Application to the Control of Autonomous Systems”, defended at the IRIT (Toulouse) on March 27th, 2011

**2012**

committee member for Benoît Romito’s PhD, “Decentralized Adaptive Storage: Autonomy and Mobility of Data in Peer-to-Peer Networks”, defended at the GREYC (Caen) on December 11th, 2012

**2013**

committee member for Johann Brault-Baron’s PhD, “On the Relevance of Enumeration”, defended at the GREYC (Caen) on April 18th, 2013

**2014**

committee member for Thi-Van-Anh Nguyen’s PhD, “Constraint Games: Modeling and Solving Games with Constraints”, defended at the GREYC (Caen) on December 12th, 2014

**2015**

committee member for Nicolas Drougard’s PhD, “Exploiting Imprecise Information Sources in Sequential Decision Making Problems under Uncertainty”, defended at the IRIT (Toulouse) on December 18th, 2015

**2016**

committee member for Florent Capelli’s PhD, “Structural Restrictions of CNF Formulas: Applications to Model Counting and Knowledge Compilation”, defended at the ELM (Paris 7) on June 27th, 2016

**2016**

committee member for Faustine Maffre’s PhD, “Ignorance is Bliss: Observability-Based Dynamic Epistemic Logics and their Applications”, defended at the IRIT (Toulouse) on September 23rd, 2016

**2017**

committee member for Zhanhao Xiao’s PhD, “Refinement of Intentions”, defended at the IRIT (Toulouse) on December 12th, 2017

**2017**

committee member for Arthur Chambon’s PhD, “Logical Characterization of Data: Application to Biological Data”, defended at the LERIA (Angers) on December 13th, 2017

## 10 Internship supervision

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**2011/2012**

supervision of Antoine Leveugle’s 2nd year internship, “Software Application for Demonstrating Work in Artificial Intelligence” (10 weeks)



**2012/2013**

supervision of Paul Le Denn’s 2nd year internship, “Data Gathering for a Software Application which Learns a User’s Habits” (10 weeks)

**2013/2014**

supervision of Florian Bénavent’s 5th year internship, “Implementation of a Java Library of Problems and Algorithms in Artificial Intelligence” (6 months)

**2013/2014**

supervision of François Danguy’s 2nd year internship, “Simulation of Traffic Management with Intelligent Traffic Lights” (10 weeks)

**2014/2015**

supervision of Guillaume Desquesnes 5th year internship, “Human-Agent Interaction for Sequential Decision Making under Uncertainty” (6 months)

**2016/2017**

supervision of Tristan Benoit’s 3rd year internship, “Library for Epistemic Logics” (8 weeks)

## 11 Funded projects and invitations

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**January, 2005**

one week stay at the Technical University of Vienna (Austria) in Gernot Salzer’s group

**January, 2006**

one week stay at the University of Linköping (Sweden) in Peter Jonsson’s group

**November, 2006–May, 2010**

local coordinator for project *Constraint Acquisition aNd Automatic Reformulation* (CANAR, national grant ANR-06-BLAN-0383-02)

**December, 2010–December, 2014**

principal investigator for project *Learning And Reasoning for Deciding Optimally using Numerical and Symbolic information* (LARDONS, national grant ANR-2010-BLAN-0215)

**October, 2010–October, 2014**

local coordinator for project *Tractability for Understanding and Pushing forward the Limits of Efficient Solving* (TUPLES, national grant ANR-2010-BLAN-0210)

**January, 2012–January, 2015**

involvement in project *Business Recommendation for Configurable Products* (BRACP, national grant ANR-11-BS02-0008)

**January, 2017–December, 2018**

coordination (for the GREYC) for project PepTraQ, with researchers in life sciences (regional grant)

## 12 Animation of research

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### 2005

member of the organization committee for MFI (French conference on Formal Models of Interaction)

### 2010

member of the organization committee for RFIA (French Conference on Pattern Recognition and Artificial Intelligence)

### 2010

cochair (with Samir Loudni) for the organization of JFPC 2010 (French-Speaking Conference on Constraint Programming)

### June, 2007–June, 2013

elected member of the executive board of the French Association for Constraint Programming (AFPC)

### 2013

member of the organization committee for ALCOSP (Adaptation and Learning in COntrol and Signal Processing)

### June, 2013–June, 2017

cohead of the French research group “Fundamental Artificial Intelligence” (IAF)

### March, 2014

reviewer of a project submitted to the Israel Science Foundation

### September, 2014

coorganizer (with Martin C. Cooper, Philippe Jégou, Lakhdar Saïs) of the workshop “Bridging the Gap Between Theory and Practice” at the conference CP 2014 (International Conference on Principles and Practice of Constraint Programming)

### December, 2014

reviewer of a project submitted to the *Fonds de recherche du Québec — Nature et technologies*

### 2017

member of the organization committee for “PFIA” (French Umbrella Conference on Artificial Intelligence)

## 13 Teaching

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(Main matters taught since 2003.)

### Around Software Engineering

- Computer Science Methodology
- UML Notation
- Object-Oriented Conception and Software Engineering
- Project Management and UML

### **Around Problem Modelling**

- Mathematical and Computer Modelling
- Logic

### **Around Artificial Intelligence**

- Logic
- Reasoning in Logic
- Planning and reinforcement learning

### **Around Algorithmics**

- Mathematical and Computer Modelling
- Algorithmics
- Algorithmic Techniques

### **Around the Web**

- HTML
- Security for Webmasters
- PHP
- JEE

## **14 Popularization**

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### **2002–2005**

development of software tools **AASeq**, **AARand**, and **PepTraq** with Joël Henry and Céline Zatylny-Gaudin (BOREA laboratory, life sciences, Unicaen). The use of these tools gave rise to publications in life sciences (see list below), and the development of **PepTraq** to a project named after it, funded by the “Région Normandie”.

## Publications in life sciences

- [1] Céline Zatylny-Gaudin, Valérie Cornet, Alexandre Leduc, Bruno Zanuttini, Erwan Corre, Gildas Le Corguillé, Benoît Bernay, Johan Garderes, Alexandra Kraut, Yohan Couté, and Joël Henry. Neuropeptidome of the cephalopod *sepia officinalis*: Identification, tissue mapping, and expression pattern of neuropeptides and neurohormones during egg laying. *Journal of Proteome Research*, 15(1):48–67, 2016.
- [2] Valérie Cornet, Joël Henry, Erwan Corre, Gildas Le Corguille, Bruno Zanuttini, and Céline Zatylny-Gaudin. Dual role of the cuttlefish salivary proteome in defense and predation. *Journal of Proteomics*, 108:209–222, 2014.
- [3] Benoît Bernay, Michèle Baudy-Floc’h, Bruno Zanuttini, Céline Zatylny, Stéphane Pouvreau, and Joël Henry. Ovarian and sperm regulatory peptides regulate ovulation in the oyster *Crassostrea gigas*. *Molecular Reproduction and Development*, 73(5):607–616, 2006.
- [4] Céline Zatylny-Gaudin, Benoît Bernay, Bruno Zanuttini, Jérôme Leprince, Hubert Vaudry, and Joël Henry. Characterization of a novel LFRFamide neuropeptide in the cephalopod *Sepia officinalis*. *Peptides*, 31(2):207–214, 2010.
- [5] Benoît Bernay, Michèle Baudy-Floc’h, Bruno Zanuttini, Jean Gagnon, and Joël Henry. Identification of SepCRP analogues in the cuttlefish *Sepia officinalis*: A novel family of ovarian regulatory peptides. *Biochemical and Biophysical Research Communications*, 338(2):1037–1047, 2005.
- [6] S. Gaudron, Bruno Zanuttini, and Joël Henry. Yolk protein in the cephalopod *Sepia officinalis*: a strategy for structural characterisation. *Invertebrate Reproduction and Development*, 48(1–3):129–135, 2005.

## 15 Publications

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### Selective International Journals

- [1] Peter Jonsson, Victor Lagerkvist, Gustav Nordh, and Bruno Zanuttini. Strong partial clones and the time complexity of SAT problems. *Journal of Computer and System Sciences*, 84:52–78, 2017. CORE Ranking: A\*.
- [2] Martin C. Cooper, Aymeric Duchein, Achref El Mouelhi, Guillaume Escamocher, Cyril Terrioux, and Bruno Zanuttini. Broken triangles: From value merging to a tractable class of general-arity constraint satisfaction problems. *Artificial Intelligence*, 234:196–218, 2016. CORE Ranking: A\*.
- [3] Frédéric Koriche and Bruno Zanuttini. Learning conditional preference networks. *Artificial Intelligence*, 174:685–703, 2010. CORE Ranking: A\*.
- [4] Bruno Zanuttini and Stanislav Živný. A note on some collapse results of valued constraints. *Information Processing Letters*, 109:534–538, 2009. CORE Ranking: B.
- [5] Élise Bonzon, Marie-Christine Lagasquie-Schiex, Jérôme Lang, and Bruno Zanuttini. Compact preference representation and Boolean games. *Journal of Autonomous Agents and Multi-Agent Systems*, 18(1):1–35, 2009. CORE Ranking: A.
- [6] Gustav Nordh and Bruno Zanuttini. What makes propositional abduction tractable. *Artificial Intelligence*, 172:1245–1284, 2008. CORE Ranking: A\*.

- [7] Ángel J. Gil, Miki Hermann, Gernot Salzer, and Bruno Zanuttini. Efficient algorithms for description problems over finite totally ordered domains. *SIAM Journal on Computing*, 38(3):922–945, 2008. CORE Ranking: A\*.
- [8] Nadia Creignou, Phokion G. Kolaitis, and Bruno Zanuttini. Structure identification of Boolean relations and plain bases for co-clones. *Journal of Computer and System Sciences*, 74(7):1103–1115, 2008. CORE Ranking: A\*.
- [9] Nadia Creignou and Bruno Zanuttini. A complete classification of the complexity of propositional abduction. *SIAM Journal on Computing*, 36(1):207–229, 2006. CORE Ranking: A\*.
- [10] Bruno Zanuttini. New polynomial classes for logic-based abduction. *Journal of Artificial Intelligence Research*, 19:1–10, 2003. Research note. CORE Ranking: A.
- [11] Jean-Jacques Hébrard and Bruno Zanuttini. An efficient algorithm for Horn description. *Information Processing Letters*, 88(4):177–182, 2003. CORE Ranking: B.
- [12] Bruno Zanuttini and Jean-Jacques Hébrard. A unified framework for structure identification. *Information Processing Letters*, 81(6):335–339, 2002. CORE Ranking: B.

## Selective International Conferences

- [1] Abdallah Saffidine, François Schwarzentruber, and Bruno Zanuttini. Knowledge-based policies for qualitative decentralized POMDPs. In Sheila McIlraith and Kilian Weinberger, editors, *Proc. 32nd AAAI Conference on Artificial Intelligence (AAAI 2018)*. AAAI Press, 2018. CORE Ranking: A\*.
- [2] Florian Benavent and Bruno Zanuttini. An experimental study of advice in sequential decision-making under uncertainty. In Sheila McIlraith and Kilian Weinberger, editors, *Proc. 32nd AAAI Conference on Artificial Intelligence (AAAI 2018)*. AAAI Press, 2018. CORE Ranking: A\*.
- [3] Fabien Labernia, Bruno Zanuttini, Brice Mayag, Florian Yger, and Jamal Atif. Online learning of acyclic conditional preference networks from noisy data. In Vijay Raghavan and Srinivas Aluru, editors, *Proc. 17th IEEE International Conference on Data Mining (ICDM 2017)*. IEEE Computer Society Press, 2017. CORE Ranking: A\*.
- [4] Esther Nicart, Bruno Zanuttini, Hugo Gilbert, Bruno Grilhères, and Frédéric Praca. Building document treatment chains using reinforcement learning and intuitive feedback. In Amol Mali and Miltos Alamaniotis, editors, *Proc. 28th International Conference on Tools with Artificial Intelligence (ICTAI 2016)*, 2016. CORE Ranking: B.
- [5] Martin C. Cooper, Achref El Mouelhi, Cyril Terrioux, and Bruno Zanuttini. On broken triangles. In Subbarao Kambhampati, editor, *Proc. 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, pages 4135–4139. AAAI Press, 2016. Sister conference paper (best of CP). CORE Ranking: A\*.
- [6] Alexandre Niveau and Bruno Zanuttini. Efficient representations for the modal logic S5. In Subbarao Kambhampati, editor, *Proc. 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, pages 1223–1229. AAAI Press, 2016. CORE Ranking: A\*.
- [7] Hugo Gilbert, Bruno Zanuttini, Paul Weng, Paolo Viappiani, and Esther Nicart. Model-free reinforcement learning with skew-symmetric bilinear utilities. In Alexander Ihler and Dominik Janzing, editors, *Proc. 32nd Conference on Uncertainty in Artificial Intelligence (UAI 2016)*, pages 252–261. AUAI Press, 2016. CORE Ranking: A\*.

- [8] Jérôme Lang and Bruno Zanuttini. Probabilistic knowledge-based programs. In Qiang Yang and Michael Wooldridge, editors, *Proc. 24th International Joint Conference on Artificial Intelligence (IJCAI 2015)*, pages 1594–1600. AAAI Press, 2015. CORE Ranking: A\*.
- [9] Martin Cooper, Achref El Mouelhi, Cyril Terrioux, and Bruno Zanuttini. On broken triangles. In Barry O’Sullivan, editor, *Proc. 20th International Conference on Principles and Practice of Constraint Programming (CP 2014)*, volume 8656 of *Lecture Notes in Computer Science*, pages 9–24. Springer, 2014. Best Technical Track Paper. CORE Ranking: A.
- [10] Thibaut Vallée, Grégory Bonnet, Bruno Zanuttini, and François Bourdon. A study of Sybil manipulations on hedonic games. In Alessio Lomuscio and Paul Scerri, editors, *Proc. 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2014)*, pages 21–28, 2014. CORE Ranking: A\*.
- [11] Damien Bigot, Hélène Fargier, Jérôme Mengin, and Bruno Zanuttini. Probabilistic conditional preference networks. In Ann Nicholson and Padhraic Smyth, editors, *Proc. 29th Conference on Uncertainty in Artificial Intelligence (UAI 2013)*. AUAI Press, 2013. CORE Ranking: A\*.
- [12] Paul Weng and Bruno Zanuttini. Interactive value iteration for Markov decision processes with unknown rewards. In Francesca Rossi, editor, *Proc. 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, 2013. CORE Ranking: A\*.
- [13] Achref El Mouelhi, Philippe Jégou, Cyril Terrioux, and Bruno Zanuttini. Some new tractable classes of CSPs and their relations with backtracking algorithms. In Carla Gomes and Meinolf Sellmann, editors, *Proc. 10th International Conference on Integration of AI and OR Techniques in Constraint Programming (CPAIOR 2013)*, volume 7874 of *Lecture Notes in Computer Science*, pages 61–76. Springer, 2013. CORE Ranking: B.
- [14] Peter Jonsson, Victor Lagerkvist, Gustav Nordh, and Bruno Zanuttini. Complexity of SAT problems, clone theory and the exponential time hypothesis. In Sanjeev Khanna, editor, *Proc. 24th Annual ACM-SIAM Symposium on Discrete Algorithms (SODA 2013)*, pages 1264–1277, 2013. CORE Ranking: A\*.
- [15] Jérôme Lang and Bruno Zanuttini. Knowledge-based programs as plans: Succinctness and the complexity of plan existence. In Burkhard C. Schipper, editor, *Proc. 14th conference on Theoretical Aspects of Rationality and Knowledge (TARK 2013)*, 2013. CORE Ranking: A.
- [16] Jérôme Lang and Bruno Zanuttini. Knowledge-based programs as plans: The complexity of plan verification. In Luc De Raedt, editor, *Proc. 20th European Conference on Artificial Intelligence (ECAI 2012)*, pages 504–509, 2012. CORE Ranking: A.
- [17] Achref El Mouelhi, Philippe Jégou, Cyril Terrioux, and Bruno Zanuttini. On the efficiency of backtracking algorithms for constraint satisfaction problems. In Robert H. Sloan, editor, *Proc. 12th International Symposium on Artificial Intelligence and Mathematics (ISAIM 2012)*, 2012. CORE Ranking: B.
- [18] Boris Lesner and Bruno Zanuttini. Efficient policy construction for MDPs represented in probabilistic PDDL. In Fahiem Bacchus, Carmel Domshlak, Stefan Edelkamp, and Malte Helmert, editors, *Proc. 21st International Conference on Automated Planning and Scheduling (ICAPS 2011)*, pages 146–153. AAAI Press, 2011. CORE Ranking: A\*.
- [19] Frédéric Koriche and Bruno Zanuttini. Learning conditional preference networks with queries. In Craig Boutilier, editor, *Proc. 21st International Joint Conference on Artificial Intelligence (IJCAI 2009)*, pages 1930–1935, 2009. Distinguished Paper. CORE Ranking: A\*.

- [20] Christian Bessiere, Thierry Petit, and Bruno Zanuttini. Making bound consistency as effective as arc consistency. In Craig Boutilier, editor, *Proc. 21st International Joint Conference on Artificial Intelligence (IJCAI 2009)*, pages 425–430, 2009. CORE Ranking: A\*.
- [21] Élise Bonzon, Marie-Christine Lagasque-Scheix, Jérôme Lang, and Bruno Zanuttini. Boolean games revisited. In Gerhard Brewka, Silvia Coradeschi, Anna Perini, and Paolo Traverso, editors, *Proc. 17th European Conference on Artificial Intelligence (ECAI 2006)*, pages 265–269. IOS Press, 2006. CORE Ranking: A.
- [22] Gustav Nordh and Bruno Zanuttini. Propositional abduction is almost always hard. In Leslie Pack Kaelbling, editor, *Proc. 19th International Joint Conference on Artificial Intelligence (IJCAI 2005)*, pages 534–539, 2005. CORE Ranking: A\*.
- [23] Ángel J. Gil, Miki Hermann, Gernot Salzer, and Bruno Zanuttini. Efficient algorithms for constraint description problems over finite totally ordered domains: Extended abstract. In David Basin and Michael Rusinovitch, editors, *Proc. 2nd International Joint Conference on Automated Reasoning (IJCAR 2004)*, number 3097 in Lecture Notes in Computer Science, pages 244–258, 2004. CORE Ranking: A\*.
- [24] Bruno Zanuttini. Approximation of relations by propositional formulas: complexity and semantics. In Sven Koenig and Robert C. Holte, editors, *Proc. 5th Symposium on Abstraction, Reformulation and Approximation (SARA 2002)*, number 2371 in Lecture Notes in Artificial Intelligence, pages 242–255. Springer, 2002. CORE Ranking: B.
- [25] Bruno Zanuttini. Approximating propositional knowledge with affine formulas. In Frank van Harmelen, editor, *Proc. 15th European Conference on Artificial Intelligence (ECAI 2002)*, pages 287–291. IOS Press, 2002. CORE Ranking: A.

## Book Chapters

- [1] Yann Chevaleyre, Frédéric Koriche, Jérôme Lang, Jérôme Mengin, and Bruno Zanuttini. Learning ordinal preferences on multiattribute domains: The case of CP-nets. In Johannes Fürnkranz and Eyke Hüllermeier, editors, *Preference Learning*, pages 273–296. Springer, 2010.
- [2] François Rioult, Bruno Zanuttini, and Bruno Crémilleux. Nonredundant generalized rules and their impact in classification. In Zbigniew Ras and Li-Shiang Tsay, editors, *Advances in Intelligent Information Systems*, number 265 in Studies in Computational Intelligence, pages 3–25. Springer-Verlag, 2010.

## Other International Publications

- [1] Victor Lagerkvist, Magnus Wahlström, and Bruno Zanuttini. Bounded bases of strong partial clones. In Gerhard Dueck, editor, *Proc. 45th International Symposium on Multiple-Valued Logic (ISMVL 2015)*, pages 189–194. IEEE, 2015.
- [2] Damien Bigot, Jérôme Mengin, and Bruno Zanuttini. Learning probabilistic CP-nets from observations of optimal items. In Ulle Endriss and João Leite, editors, *Proc. 7th Starting AI Researcher Symposium (STAIRS 2014)*, volume 264 of *Frontiers in Artificial Intelligence and Applications*, pages 81–90, 2014.
- [3] Damien Bigot, Hélène Fargier, Jérôme Mengin, and Bruno Zanuttini. Using and learning GAI-decompositions for representing ordinal rankings. In Johannes Fürnkranz and Eyke Hüllermeier, editors, *Proc. 4th International Workshop on Preference Learning: Problems and Applications in AI (PL 2012)*, pages 5–10, 2012.

- [4] Jérôme Lang and Bruno Zanuttini. Knowledge-based programs as plans: The complexity of plan verification (extended abstract). In Giacomo Bonanno, Hans van Ditmarsch, and Wiebe van der Hoek, editors, *Proc. 10th Conference on Logic and the Foundations of Game and Decision Theory (LOFT 2012)*, 2012.
- [5] Boris Lesner and Bruno Zanuttini. Handling ambiguous effects in action learning. In Scott Sanner, editor, *Proc. 9th European Workshop on Reinforcement Learning (EWRL 2011)*, 2011.
- [6] Gustav Nordh and Bruno Zanuttini. Frozen Boolean partial co-clones. In Takahiro Hanyu, editor, *Proc. 39th International Symposium on Multiple-Valued Logic (ISMVL 2009)*, pages 120–125. IEEE, 2009.
- [7] Bruno Mermet, Gaële Simon, Arnaud Saval, and Bruno Zanuttini. Specifying, verifying and implementing a MAS: A case study. In Mehdi Dastani, Amal El Fallah Segrouchni, Alessandro Ricci, and Michael Winikoff, editors, *Post-Proc. 5th International Workshop on Programming Multi-Agent Systems (ProMAS 2007)*, number 4908 in Lecture Notes in Artificial Intelligence, pages 172–189. Springer, 2007.
- [8] Christian Bessiere, César Fernández, and Bruno Zanuttini. Measuring search trees. In Brahim Hnich and Toby Walsh, editors, *Proc. ECAI 2004 Workshop on Modelling and Solving Problems with Constraints*, 2004.

## National Publications and Direction of Proceedings in French

- [1] Esther Nicart, Bruno Zanuttini, Bruno Grilhères, Patrick Giroux, and Arnaud Saval. Amélioration continue d’une chaîne de traitement de documents avec l’apprentissage par renforcement. *Revue d’Intelligence Artificielle*, 31(6):619–648, 2017. In French.
- [2] Esther Nicart, Bruno Zanuttini, Hugo Gilbert, Bruno Grilhères, and Frédéric Praca. Building document treatment chains using reinforcement learning and intuitive feedback. In Damien Pellier, editor, *Proc. 11es Journées Francophones sur la Planification, la Décision et l’Apprentissage pour la conduite de systèmes (JFPDA 2016)*, 2016.
- [3] Esther Nicart, Bruno Zanuttini, Bruno Grilhères, and Frédéric Praca. Dora Q-learning - making better use of explorations. In Damien Pellier, editor, *Proc. 11es Journées Francophones sur la Planification, la Décision et l’Apprentissage pour la conduite de systèmes (JFPDA 2016)*, 2016.
- [4] Florian Benavent and Bruno Zanuttini. Intégration de recommandations simples dans un MDP. In Damien Pellier, editor, *Proc. 11es Journées Francophones sur la Planification, la Décision et l’Apprentissage pour la conduite de systèmes (JFPDA 2016)*, 2016. In French.
- [5] Alexandre Niveau and Bruno Zanuttini. Représentations efficaces pour la logique modale S5. In Tiago de Lima and Bruno Zanuttini, editors, *Proc. 10es Journées d’Intelligence Artificielle Fondamentale (IAF 2016)*, 2016. In French.
- [6] Martin Cooper, Achref El Mouelhi, Cyril Terrioux, and Bruno Zanuttini. Autour des triangles cassés. In Gilles Audemard, editor, *Proc. 11es Journées Francophones de Programmation par Contraintes (JFPC 2015)*, 2015. In French.
- [7] Bruno Zanuttini. Sur des propriétés structurelles des formules de Horn. In Nicolas Maudet and Bruno Zanuttini, editors, *Proc. 9es Journées d’Intelligence Artificielle Fondamentale (IAF 2015)*, 2015. In French.



- [8] Anaëlle Wilczynski, Bruno Zanuttini, and Jérôme Lang. Génération de plans à base de connaissances. In Frédéric Maris, editor, *Proc. 10es Journées Francophones sur la Planification, la Décision et l'Apprentissage pour la conduite de systèmes (JFPDA 2015)*, 2015. In French.
- [9] Esther Nicart, Bruno Zanuttini, Bruno Grilhères, and Patrick Giroux. Amélioration continue d'une chaîne de traitement de documents avec l'apprentissage par renforcement. In Marie-Hélène Abel, editor, *Proc. des 26es journées francophones d'Ingénierie des Connaissances (IC 2015)*, 2015. In French.
- [10] Damien Bigot, Jérôme Mengin, and Bruno Zanuttini. Apprentissage de CP-nets probabilistes. In Mounir Ben Ayed and Philippe Leray, editors, *Proc. Journées Francophones sur les Réseaux Bayésiens et les Modèles Graphiques Probabilistes (JFRB 2014)*, 2014. In French.
- [11] Fabien Chhel, Frédéric Lardeux, Frédéric Saubion, and Bruno Zanuttini. Application du problème de caractérisation multiple à la conception de tests de diagnostic pour la biologie végétale. *Revue d'intelligence artificielle*, 4–5:649–668, 2013. In French.
- [12] Jérôme Lang and Bruno Zanuttini. Knowledge-based programs as plans: Succinctness and the complexity of plan existence. In Rémi Munos, editor, *Proc. 8es Journées Francophones sur la Planification, la Décision et l'Apprentissage pour la conduite de systèmes (JFPDA 2013)*, 2013.
- [13] Bruno Zanuttini, Guillaume Laurent, and Olivier Buffet, editors. *Apprentissage par renforcement et planification adaptative*, volume 27 of *Revue d'Intelligence Artificielle*. Lavoisier, 2013.
- [14] Thibaut Vallée, Grégory Bonnet, Bruno Zanuttini, and François Bourdon. étude des attaques Sybil sur les jeux hédoniques. In Élise Bonzon and Laurence Cholvy, editors, *Proc. 7es journées francophones sur les Modèles Formels de l'Interaction (MFI 2013)*, 2013. In French.
- [15] Nicolas Côté, Bruno Zanuttini, Maroua Bouzid, and Abdel-illah Mouaddib. Prise en compte des recommandations de l'humain dans le processus décisionnel d'un agent. In Élise Bonzon and Laurence Cholvy, editors, *Proc. 7es journées francophones sur les Modèles Formels de l'Interaction (MFI 2013)*, 2013. In French.
- [16] Damien Bigot, Hélène Fargier, Jérôme Mengin, and Bruno Zanuttini. Probabilistic conditional preference networks. In *Proc. 7es Journées de l'Intelligence Artificielle Fondamentale*, 2013.
- [17] Damien Bigot, Hélène Fargier, Jérôme Mengin, and Bruno Zanuttini. Apprentissage de GAI-décompositions. In Sébastien Konieczny and Nicolas Maudet, editors, *Proc. 6es Journées de l'Intelligence Artificielle Fondamentale*, pages 31–40, 2012. In French.
- [18] Achref El Mouelhi, Philippe Jégou, Cyril Terrioux, and Bruno Zanuttini. Sur la complexité des algorithmes de backtracking et quelques nouvelles classes polynomiales pour CSP. In Simon de Givry, editor, *Proc. 8es Journées Francophones de Programmation par Contraintes (JFPC 2012)*, pages 160–169, 2012. In French.
- [19] Bruno Zanuttini, editor. *Proc. 6es Journées Francophones de Planification, Décision et Apprentissage pour la conduite de systèmes (JFPDA 2011)*, 2011.
- [20] Boris Lesner and Bruno Zanuttini. Résolution exacte et approchée de problèmes de décision markoviens formulés en logique propositionnelle. *Revue d'intelligence artificielle*, 24(2):131–158, 2010. In French.

- [21] Boris Lesner and Bruno Zanuttini. Apprentissage par renforcement de PDM factorisés avec effets corrélés. In *Proc. 5es Journées Francophones Planification Décision Apprentissage (JFPDA 2010)*, 2010. In French.
- [22] Frédéric Koriche and Bruno Zanuttini. Apprentissage de réseaux de préférences ceteris paribus. In Laurence Cholvy and Sébastien Konieczny, editors, *Proc. Journées d’Intelligence Artificielle Fondamentale (IAF 2008)*. GDR I3, thème 1 : Intelligence Artificielle Fondamentale, 2008. In French.
- [23] Christian Bessiere, Thierry Petit, and Bruno Zanuttini. Réordonnement de domaines dans les réseaux de contraintes. In Gilles Trombettoni, editor, *Proc. 4es Journées Francophones de Programmation par Contraintes (JFPC 2008)*, pages 133–142, 2008. In French.
- [24] François Rioult, Bruno Zanuttini, and Bruno Crémilleux. Apport de la négation pour la classification supervisée à l’aide d’associations. In Florence d’Alché Buc, editor, *Proc. Conférence francophone sur l’apprentissage automatique (CAp 2008)*, pages 183–196, 2008. In French.
- [25] Bruno Zanuttini, editor. *Proc. 8es Rencontres nationales des Jeunes Chercheurs en Intelligence Artificielle (RJCIA 2007)*, Toulouse, France, 2007. Association Française pour l’Intelligence Artificielle (AFIA), Cépaduès-Éditions.
- [26] Florian Letombe and Bruno Zanuttini. Une approche DPLL pour l’abduction. In François Fages, editor, *Proc. 3es Journées Francophones de Programmation par Contraintes (JFPC 2007)*, pages 11–20, 2007. In French.
- [27] Bruno Zanuttini. Des classes polynomiales pour l’abduction en logique propositionnelle. In Jin-Kao Hao, editor, *Proc. 8es Journées Nationales sur la Résolution Pratique de Problèmes NP-Complets (JNPC 2002)*, pages 255–268, 2002. In French.