



# Ivan Varzinczak

## Short bio

Ivan José Varzinczak is an associate professor at Université d'Artois, France. He holds a Ph.D. (2006) in artificial intelligence from Université Paul Sabatier, France, an M.Sc. (2002) and a B.Sc. (2000) both in computer science from the Federal University of Paraná, Brazil. Before joining Université d'Artois, Ivan was a postdoctoral researcher at the CSIR Meraka Institute in South Africa and a professor of logic and theoretical computer science at the Federal University of Rio de Janeiro, Brazil.

Ivan's main research interest area is logic-based knowledge representation and reasoning in artificial intelligence, with focus on modal and description logics and their applications in non-monotonic reasoning, reasoning about actions and change, and the semantic web. He has co-authored more than 50 peer-reviewed publications ranging from articles in journals (JAIR, Artificial Intelligence, JoLLI, JANCL, Logica Universalis), full papers in international conference proceedings (IJCAI, KR, ECAI, JELIA, AiML, AI, ISWC, TARK), and papers in international workshops (DL, NMR, M4M, Commonsense, NRAC). These publications altogether have received more than 600 citations, according to Google Scholar (<http://tinyurl.com/varzinczak>).

Ivan is a guest editor of the special issue of the International Journal of Approximate Reasoning on Defeasible and Ampliative Reasoning, and he was a guest editor of the special issue of the Journal of Web Semantics on Reasoning with Context in the Semantic Web. Ivan is a co-chair for the Workshop and Tutorial Program of KR 2018 and was the Publicity and Sponsorship Chair for KR 2016. He is one of the founding members and co-chair of both the ARCOE and DARE workshop series, and a co-organizer of the 2014 edition of WoMO. Ivan was also in the guest editorial board of the special issue of the Semantic Web Journal on Web Reasoning and Rule Systems. He is a senior PC member of IJCAI 2018 and has been a PC member of IJCAI, KR, AAI, ECAI, JELIA and other international conferences and workshops on several occasions. Besides that, Ivan has been invited to review papers for 8 different journals, including Artificial Intelligence, the Journal of Artificial Intelligence Research, the Journal of Logic and Computation and the Journal of Philosophical Logic, four top journals in his area of expertise. In 2012 Ivan served as a referee for the *Wiener Wissenschafts-, Forschungs- und Technologiefonds* (WWTF), the Vienna Science and Technology Fund.

Ivan has had visiting researcher appointments (paid for by the institution visited) at the following universities: Universidade Federal de Pernambuco, Brazil (3 weeks, 2017), Université du Luxembourg (1 week in 2017 and 2 weeks in 2014), Stellenbosch University and the University of Cape Town, South Africa (1 month, 2017), Cardiff University, UK (1 week, 2017), Royal Melbourne Institute of Technology, Australia (1 week, 2012), Free University of Bolzano, Italy (1 month in 2012 and 3 weeks in 2009), Université de Toulouse, France (3 weeks, 2010). Ivan was also given the opportunity to visit and give talks at Rutgers University (2016), Institut de Recherche en Informatique et Systèmes Aléatoires, France (2014), Universidade Federal do Rio de Janeiro, Brazil (2013), Laboratoire Lorrain de Recherche en Informatique et ses Applications, France (2013), University of New South Wales, Australia (2011), the City University of New York (2010), Universidade Nova de Lisboa, Portugal (2010), Universidade de São Paulo, Brazil (2009), University of Western Sydney, Australia (2008), and at the National ICT Australia (2008).

**Google Scholar profile:** <http://tinyurl.com/varzinczak>

## Languages

**Portuguese** (mother tongue), **English** (fluent), **French** (fluent), **Spanish** (fluent).

## Education

2002–2006 **Ph.D. in artificial intelligence**, *Université Paul Sabatier*, Toulouse, France.

2000–2002 **M.Sc. in computer science**, *Federal University of Paraná*, Curitiba, Brazil.

1996–2000 **B.Sc. in computer science**, *Federal University of Paraná*, Curitiba, Brazil.

## Current position

Since 2015 **Professor**, *Institut Universitaire de Technologie de Lens, Université d'Artois*, Lens, France.

## Research interests

- o Logic-based knowledge representation and reasoning in artificial intelligence
- o Non-monotonic reasoning, belief change, reasoning about actions
- o Non-classical logics, modal logic, description logics
- o Automated theorem proving

## Theses

### Ph.D. thesis

title *What is a good domain description? Evaluating and revising action theories in dynamic logic*

supervisor Andreas Herzig (CNRS, France)

examiners Michael Thielscher (Dresden University, Germany)

Marie-Christine Rousset (LSR-IMAG, France)

Guilherme Bittencourt (Federal University of Santa Catarina, Brazil)

defense date October 27<sup>th</sup> 2006

### Master's thesis

title *Causalidade e dependência em raciocínio sobre ações* (in Portuguese)  
(Causality and dependence in reasoning about actions)

supervisor Marcos Castilho (Federal University of Paraná, Brazil)

examiners Marcelo Finger (University of São Paulo, Brazil)

Michel Gagnon (Federal University of Paraná, Brazil)

defense date June 6<sup>th</sup> 2002

## Publications

### Book chapter

*A Propositional Typicality Logic for Extending Rational Consequence*. R. Booth, T. Meyer and I.J. Varzinczak. *Trends in Belief Revision and Argumentation Dynamics*, King's College Publications, 2013.

### Journal articles

JoLLI *Preferential Accessibility and Preferred Worlds*. K. Britz and I.J. Varzinczak. *Journal of Logic, Language and Information*, to appear, 2018.

JANCL *From KLM-Style Conditionals to Defeasible Modalities, and Back*. K. Britz and I.J. Varzinczak. *Journal of Applied Non-Classical Logics*, to appear, 2017.

Logica Universalis *Constrained Consequence*. K. Britz, J. Heidema and I.J. Varzinczak. *Logica Universalis*, volume 5, number 2, 2011.

- ENTCS *Preferential Reasoning for Modal Logics*. K. Britz, T. Meyer and I.J. Varzinczak. *Electronic Notes in Theoretical Computer Science*, volume 278, 2011.
- JAIR *On the Link between Partial Meet, Kernel, and Infra Contraction and its Application to Horn Logic*. R. Booth, T. Meyer, I.J. Varzinczak and R. Wassermann. *Journal of Artificial Intelligence Research*, volume 42, 2011.
- JAIR *On Action Theory Change*. I.J. Varzinczak. *Journal of Artificial Intelligence Research*, volume 37, 2010.
- AI Journal *Metatheory of Actions: Beyond Consistency*. A. Herzig and I.J. Varzinczak. *Artificial Intelligence*, volume 171, number 16–17, 2007.
- JANCL *Regression in Modal Logic*. R. Demolombe, A. Herzig and I.J. Varzinczak. *Journal of Applied Non-Classical Logics*, volume 13, number 2, 2003.
- Papers in international conference proceedings**
- JELIA, LNAI *Introducing Role Defeasibility in Description Logics*. K. Britz and I.J. Varzinczak. *Proceedings of the 15<sup>th</sup> European Conference on Logic in Artificial Intelligence*, Larnaca, Cyprus, 2016.
- ISWC *Introducing Defeasibility into OWL Ontologies*. G. Casini, T. Meyer, K. Moodley, U. Sattler and I.J. Varzinczak. *Proceedings of the 14<sup>th</sup> International Semantic Web Conference*, Bethlehem, USA, 2015.
- IJCAI *On the entailment problem for a logic of typicality*. R. Booth, G. Casini, T. Meyer and I.J. Varzinczak. *Proceedings of the 24<sup>th</sup> International Joint Conference on Artificial Intelligence*, Buenos Aires, Argentina, 2015.
- TARK *Defeasible Modalities*. K. Britz and I.J. Varzinczak. *Proceedings of the 14<sup>th</sup> Conference on Theoretical Aspects of Rationality and Knowledge*, Chennai, India, 2013.
- AI, LNAI *Normal Modal Preferential Consequence*. K. Britz, T. Meyer and I.J. Varzinczak. *Proceedings of the 25<sup>th</sup> Australasian Joint Conference on Artificial Intelligence*, Sydney, Australia, 2012.
- SAICSIT, ACM *A Defeasible Reasoning Approach for Description Logic Ontologies*. K. Moodley, T. Meyer and I.J. Varzinczak. *Proceedings of the Annual Conference of the South African Institute for Computer Scientists and Information Technologists*, Centurion, South Africa, 2012.
- JELIA, LNAI *PTL: A Propositional Typicality Logic*. R. Booth, T. Meyer and I.J. Varzinczak. *Proceedings of the 13<sup>th</sup> European Conference on Logic in Artificial Intelligence*, Toulouse, France, 2012.
- AI, LNAI *Semantic Foundation for Preferential Description Logics*. K. Britz, T. Meyer and I.J. Varzinczak. *Proceedings of the 24<sup>th</sup> Australasian Joint Conference on Artificial Intelligence*, Perth, Australia, 2011.
- IEEE *A Logic-Based Perspective on Agent Reconfiguration: Preliminary Report*. T. Meyer and I.J. Varzinczak. *Proceedings of the IEEE Conference Africon*, Livingstone, Zambia, 2011.
- RR *Root Justifications for Ontology Repair*. K. Moodley, T. Meyer and I.J. Varzinczak. *5<sup>th</sup> International Conference on Web Reasoning and Rule Systems*, Galway, Ireland, 2011.
- AI, LNAI *A Logic for Reasoning about Actions and Explicit Observations*. G. Rens, I.J. Varzinczak, T. Meyer and A. Ferrein. *Proceedings of the 23<sup>rd</sup> Australasian Joint Conference on Artificial Intelligence*, Adelaide, Australia, 2010.
- ECAI *Horn Belief Change: A Contraction Core*. R. Booth, T. Meyer, I.J. Varzinczak and R. Wassermann. *Proceedings of the 19<sup>th</sup> European Conference on Artificial Intelligence*, Lisbon, Portugal, 2010.
- IJCAI *Next Steps in Propositional Horn Contraction*. R. Booth, T. Meyer and I.J. Varzinczak. *Proceedings of the 21<sup>st</sup> International Joint Conference on Artificial Intelligence*, Pasadena, USA, 2009.
- KR *Action Theory Contraction and Minimal Change*. I.J. Varzinczak. *Proceedings of the 11<sup>th</sup> International Conference on Principles of Knowledge Representation and Reasoning*, Sydney, Australia, 2008.

- JELIA, LNAI *A Modularity Approach for a Fragment of  $\mathcal{ALC}$* . A. Herzig and I.J. Varzinczak. *Proceedings of the 10<sup>th</sup> European Conference on Logic in Artificial Intelligence*, Liverpool, UK, 2006.
- ECAI *Elaborating Domain Descriptions*. A. Herzig, L. Perrussel and I.J. Varzinczak. *Proceedings of the 17<sup>th</sup> European Conference on Artificial Intelligence*, Riva del Garda, Italy, 2006.
- IJCAI *Cohesion, Coupling and the Meta-theory of Actions*. A. Herzig and I.J. Varzinczak. *Proceedings of the 19<sup>th</sup> International Joint Conference on Artificial Intelligence*, Edinburgh, UK, 2005.
- AiML *On the Modularity of Theories*. A. Herzig and I.J. Varzinczak. *Advances in Modal Logic Series*, King's College Publications, 2005 (Selected papers of AiML'04).
- ECAI *Domain Descriptions Should Be Modular*. A. Herzig and I.J. Varzinczak. *Proceedings of the 16<sup>th</sup> European Conference on Artificial Intelligence*, Valencia, Spain, 2004.
- Refereed papers in international workshops
- Commonsense *Context-based defeasible subsumption for  $dSROIQ$* . K. Britz and I.J. Varzinczak. *13<sup>th</sup> International Symposium on Logical Formalizations of Commonsense Reasoning*, London, UK, 2017.
- DL *Towards defeasible  $SROIQ$* . K. Britz and I.J. Varzinczak. *30<sup>th</sup> International Workshop on Description Logics*, Montpellier, France, 2017.
- NMR *Preferential Modalities Revisited*. K. Britz and I.J. Varzinczak. *16<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Cape Town, South Africa, 2016.
- Commonsense *What Does Entailment for PTL Mean?*. R. Booth, G. Casini, T. Meyer and I.J. Varzinczak. *12<sup>th</sup> International Symposium on Logical Formalizations of Commonsense Reasoning*, Palo Alto, USA, 2015.
- PRUV *Towards a Logic of Dilation*. K. Britz and I.J. Varzinczak. *1<sup>st</sup> International Workshop on Logics for Reasoning about Preferences, Uncertainty and Vagueness*, Vienna, Austria, 2014.
- DL *Towards Practical Defeasible Reasoning for Description Logics*. G. Casini, T. Meyer, K. Moodley and I.J. Varzinczak. *26<sup>th</sup> International Workshop on Description Logics*, Ulm, Germany, 2013.
- DL *Preferential Role Restrictions*. K. Britz, G. Casini, T. Meyer and I.J. Varzinczak. *26<sup>th</sup> International Workshop on Description Logics*, Ulm, Germany, 2013.
- DL *Nonmonotonic reasoning in Description Logics: Rational Closure for the ABox*. G. Casini, T. Meyer, K. Moodley and I.J. Varzinczak. *26<sup>th</sup> International Workshop on Description Logics*, Ulm, Germany, 2013.
- DL *A Protégé Plug-in for Defeasible Reasoning*. K. Moodley, T. Meyer and I.J. Varzinczak. *25<sup>th</sup> International Workshop on Description Logics*, Rome, Italy, 2012.
- NMR *Defeasible Modes of Inference: A Preferential Perspective*. K. Britz and I.J. Varzinczak. *14<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Rome, Italy, 2012.
- DL *Concept Model Semantics for DL Preferential Reasoning*. K. Britz, T. Meyer and I.J. Varzinczak. *24<sup>th</sup> International Workshop on Description Logics*, Barcelona, Spain, 2011.
- NMR *Semantic Diff as the Basis for Knowledge Base Versioning*. E. Franconi, T. Meyer and I.J. Varzinczak. *13<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Toronto, Canada, 2010.
- NMR *Pertinent Reasoning*. K. Britz, J. Heidema and I.J. Varzinczak. *13<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Toronto, Canada, 2010.
- NMR *A Contraction Core for Horn Belief Change: Preliminary Report*. R. Booth, T. Meyer, I.J. Varzinczak and R. Wassermann. *13<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Toronto, Canada, 2010.
- NRAC *On the Revision of Action Laws: an Algorithmic Approach*. I.J. Varzinczak. *IJCAI Workshop on Nonmonotonic Reasoning, Action and Change*, Pasadena, USA, 2009.
- Commonsense *How Do I Revise My Agent's Action Theory?*. I.J. Varzinczak. *9<sup>th</sup> Symposium on Formalizations of Commonsense Reasoning*, Toronto, Canada, 2009.

- Commonsense *Next Steps in Propositional Horn Contraction*. R. Booth, T. Meyer and I.J. Varzinczak. *9<sup>th</sup> Symposium on Formalizations of Commonsense Reasoning*, Toronto, Canada, 2009.
- NMR *Action Theory Revision in Dynamic Logic*. I.J. Varzinczak. *12<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Sydney, Australia, 2008.
- NMR *Elaborating Domain Descriptions*. A. Herzig, L. Perrussel and I.J. Varzinczak. *11<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Lake District, UK, 2006.
- NMR *Domain Descriptions Should Be Modular*. A. Herzig and I.J. Varzinczak. *10<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Whistler, Canada, 2004.
- M4M *Regression in Modal Logic*. R. Demolombe, A. Herzig and I.J. Varzinczak. *Methods for Modalities*, Nancy, France, 2003.
- NMR *It Depends on the Context! A Decidable Logic of Actions and Plans Based on a Ternary Dependence Relation*. M.A. Castilho, A. Herzig and I.J. Varzinczak. *9<sup>th</sup> Workshop on Nonmonotonic Reasoning*, Toulouse, France, 2002.

## Edition of journals

- IJAR Guest editor of the special issue of the International Journal of Approximate Reasoning on *Defeasible and Ampliative Reasoning*. Co-editors: R. Booth, G. Casini, and I.J. Varzinczak. In progress.
- J. of Web Semantics Guest editor of the special issue of the Journal of Web Semantics on *Reasoning with Context in the Semantic Web*. Co-editors: A. Bundy, J. Lehmann, and I.J. Varzinczak. 2011/12. <http://www.sciencedirect.com/science/journal/15708268/12-13>

## Organization of events

- KR'18 Co-chair for the Workshop and Tutorial Program of the *International Conference on Principles of Knowledge Representation and Reasoning*, Tempe, USA, 2018.
- DARe'17 Co-chair of the *Workshop on Defeasible and Ampliative Reasoning*, co-located with LPNMR'17. Co-chairs: R. Booth, G. Casini and I.J. Varzinczak. Espoo, Finland, 2017.
- DARe'16 Co-chair of the *Workshop on Defeasible and Ampliative Reasoning*, co-located with ECAI'16. Co-chairs: R. Booth, G. Casini, S. Klarman, G. Richard and I.J. Varzinczak. The Hague, Netherlands, 2016. <http://dare2016.yolasite.com>
- KR'16 Publicity and Sponsorship Chair for the *International Conference on Principles of Knowledge Representation and Reasoning*, Cape Town, South Africa, 2016.
- DARe'15 Co-chair of the *Workshop on Defeasible and Ampliative Reasoning*, co-located with IJCAI'15. Co-chairs: R. Booth, G. Casini, S. Klarman, G. Richard and I.J. Varzinczak. Buenos Aires, Argentina, 2015. <http://dare2015.yolasite.com>
- DARe'14 Co-chair of the *Workshop on Defeasible and Ampliative Reasoning*, co-located with ECAI'14. Co-chairs: R. Booth, G. Casini, S. Klarman, G. Richard and I.J. Varzinczak. Prague, Czech Republic, 2014. <http://dare2014.yolasite.com>
- WoMO'14 Co-chair of the *International Workshop on Modular Ontologies*, co-located with FOIS'14. Co-chairs: K. Baclawski, T. Groza, T. Hahmann and I.J. Varzinczak. Rio de Janeiro, Brazil, 2014. <http://iaoa.org/womo>
- FCCOD Co-organizer of the research school on *Foundations and Challenges of Change in Ontologies and Databases*, Bolzano, Italy, 2014.
- WCP5 Member of the organizing committee of the *Fifth World Congress on Paraconsistency*. Kolkata, India, 2014. <http://www.paraconsistency.org>
- ARCOE-LogIC Co-chair of the *International Workshop on Acquisition and Representation of COntexts for Evaluation with LogICal Inference*, co-located with LPNMR'13. Co-chairs: M. Fink, M. Homola, A. Mileo and I.J. Varzinczak. Corunna, Spain, 2013. <http://www.arcoe.org>

- ARCOE'12 Co-chair of the *Workshop on Acquisition, Representation and Reasoning with Contextualized Knowledge*, co-located with ECAI'12. Co-chairs: M. Fink, M. Homola, A. Mileo and I.J. Varzinczak. Montpellier, France, 2012.
- ARCOE'11 Co-chair of the *Workshop on Automated Reasoning about Context and Ontology Evolution*, co-located with IJCAI'11. Co-chairs: A. Bundy, J. Lehmann, and I.J. Varzinczak. Barcelona, Spain, 2011.
- ARCOE'10 Co-chair of the *Workshop on Automated Reasoning about Context and Ontology Evolution*, co-located with ECAI'10. Co-chairs: A. Bundy, J. Lehmann, G. Qi and I.J. Varzinczak. Lisbon, Portugal, 2010.
- ARCOE'09 Co-chair of the *Workshop on Automated Reasoning about Context and Ontology Evolution*, co-located with IJCAI'09. Co-chairs: A. Bundy, J. Lehmann, G. Qi and I.J. Varzinczak. Pasadena, USA, 2009.

## Invited talks

- WASPIQ *Foundations and Challenges of Reasoning Defeasibly over DL Ontologies*. Workshop on ASP technologies for Querying large scale multisource heterogeneous web information (WASPIQ). Arras, France, June 2017.
- JIAF *Pushing the Frontiers of Defeasible Reasoning in Description-Logic Ontologies*. Journées sur l'Intelligence Artificielle Fondamentale (JIAF). Montpellier, France, June 2016.

## Participation in editorial boards, program committees and refereeing

- IJCAI Senior PC member of the *International Joint Conference on Artificial Intelligence*, 2018.
- AAAI PC member of the *International Conference of the Association for the Advancement of Artificial Intelligence*, 2011, 2018.
- IJCAI PC member of the *International Joint Conference on Artificial Intelligence*, 2011, 2013, 2015, 2016, 2017.
- AI PC member of the *Australasian Joint Conference on Artificial Intelligence*, 2013, 2016, 2017.
- EPIA PC member of the *Portuguese Conference on Artificial Intelligence*, 2017.
- JELIA PC member of the *European Conference on Logic in Artificial Intelligence*, 2016.
- IBERAMIA PC member of the *Ibero-American Conference on Artificial Intelligence*, 2016.
- WOMoCoE PC member of the *International Workshop on Ontology Modularity, Contextuality, and Evolution*, 2016.
- KR PC member of the *International Conference on Principles of Knowledge Representation and Reasoning*, 2012, 2016.
- NMR PC member of the *International Workshop on Nonmonotonic Reasoning*, 2016.
- ToCL Referee for the journal *ACM Transactions on Computational Logic*, 2013, 2015.
- JAIR Referee for the *Journal of Artificial Intelligence Research*, 2010–2012 and 2014, 2015.
- Context PC member of the *International and Interdisciplinary Conference on Modeling and Using Context*, 2015.
- WL4AI PC member of the *Workshop on Weighted Logics for Artificial Intelligence*, 2015.
- LSFA PC member of the *International Workshop on Logics and Semantic Frameworks with Applications*, 2015.
- Ontochange PC member of the *Workshop on Belief Change and Non-Monotonic Reasoning in Ontologies and Databases*, 2015.
- WoMO PC member of the *Workshop on Modular Ontologies*, 2015.
- JBCS Referee for the *Journal of the Brazilian Computer Society*, 2014.

- ARCOE- LogIC PC member of the *International Workshop on Acquisition and Representation of COntexts for Evaluation with LogICal Inference*, 2014.
- SWJ Member of the Guest Editorial Board for the Special Issue of the *Semantic Web Journal on Web Reasoning and Rule Systems*, 2013.
- JLC Referee for the *Journal of Logic and Computation*, 2013.
- AI Referee for the journal *Artificial Intelligence*, 2013.
- JPL Referee for the special issue of the *Journal of Philosophical Logic* on Knowledge Representation and Reasoning, 2013.
- JAL Referee for the *Journal of Applied Logic*, 2013.
- Logique et Analyse Referee for the journal *Logique et Analyse*, 2013.
- RR PC member of the *International Conference on Web Reasoning and Rule Systems*, 2013.
- NRAC PC member of the IJCAI workshop on *Nonmonotonic Reasoning, Actions and Change*, 2013.
- AOW PC member of the *Australasian Ontology Workshop*, 2010, 2011, 2012.
- BNC PC member of the ECAI'12 workshop on *Belief Change, Non-monotonic Reasoning and Conflict Resolution*, 2012.
- KAIS Referee for the *Journal of Knowledge and Information Systems*, 2011.
- INS Referee for the journal *Information Sciences*, 2011.
- RJCIA PC member of the *Rencontres des Jeunes Chercheurs en Intelligence Artificielle*, 2011.
- ECAI PC member of the *European Conference on Artificial Intelligence*, 2010.
- KROW PC member of the special issue of *Applied Artificial Intelligence* on the KR workshop on *Knowledge Representation and Ontologies*, 2009.
- MICAI PC member of the track *Algorithmic and Applied Mathematics* of the *Mexican International Conference in Computer Science*, 2009.

## Other research activities

### Supervision

- M.Sc. Co-supervision of Ayoub El Gueddi (Université d'Artois, France). Title of work: *Agrégation et internship pré-ordre partiel*. 2017.
- M.Sc. Supervision of Issam Zebdi (Université d'Artois, France). Title of work: *Implémentation de deux internship méthodes de fermeture rationnelle pour la logique de typicité propositionnelle*. 2017.
- M.Sc. thesis Co-supervision of Glauco Trindade (PESC-COPPE and Federal University of Rio de Janeiro, Brazil). Title of M.Sc. thesis: *Video Game Development Ontology*. 2015.
- Ph.D. thesis Co-supervision of Kodylan Moodley (Meraka Institute and University of KwaZulu-Natal, South Africa). Title of Ph.D. thesis: *Defeasible Reasoning for Description Logic Ontologies*. 2011–2015.
- M.Sc. thesis Co-supervision of Kodylan Moodley (Meraka Institute and University of KwaZulu-Natal, South Africa). Title of M.Sc. thesis: *Debugging and Repair of Description Logic Ontologies*. 2009–2011.
- Honours Co-supervision of Maurice Ndashimye (African Institute for Mathematical Sciences, South Africa). Title of honours project: *Tableau Methods for Epistemic Modal Logics*. 2011.

### Examining boards

- Ph.D. thesis Examiner for Eunice Palmeira da Silva (Federal University of Pernambuco, Brazil). Title of Ph.D. thesis: *Conversão de Provas em Lógica de Descrições  $\mathcal{ALC}$  Geradas pelo Método de Conexões para Sequentes*. 2017.
- Ph.D. thesis Examiner for Willem Coetzer (University of KwaZulu-Natal, South Africa). *A Knowledge-Based System for Automated Discovery of Ecological Interactions in Flower-Visiting Data*. 2017.

- M.Sc. thesis Examiner for Dimas de Melo Filho (Federal University of Pernambuco, Brazil). Title of M.Sc. thesis: *A Connection-based Reasoner for ALC Ontologies*. 2015.
- Ph.D. thesis Examiner for Ryan de Azevedo (Federal University of Pernambuco, Brazil). Title of Ph.D. thesis: *Um sistema de diálogo inteligente baseado em lógica de descrições*. 2015.
- Ph.D. thesis Examiner for Raphael Cóbe (University of São Paulo, Brazil). Title of Ph.D. thesis: *Integração entre múltiplas ontologias: reuso e gerência de conflitos*. 2014.
- M.Sc. thesis Examiner for José Curado (University of São Paulo, Brazil). Title of M.Sc. thesis: *Typicality in description logics*. 2014.
- M.Sc. thesis Examiner for Riku Nortjé (University of South Africa). Title of M.Sc. thesis: *Module Extraction for Inexpressive Description Logics*. 2011.

#### Referee of project proposals and books

- Springer Referee for the Springer book series *Trends in Logic*. 2013.
- WWTF Referee for the *Wiener Wissenschafts-, Forschungs- und Technologiefonds* (WWTF), the Vienna Science and Technology Fund. 2012.

#### Research visits and research seminars

- UFPE 3-week visit to Universidade Federal de Pernambuco, Brazil, August 2017. Collaboration with Fred Freitas, 2 seminars given.
- Unilu 1-week visit to the University of Luxembourg, July 2017. Collaboration with Giovanni Casini.
- Dagstuhl Invited to the Dagstuhl seminar on *Epistemic Planning*. June 2017. <http://www.dagstuhl.de/17231>
- SU and UCT 1-month visit to Stellenbosch University and the University of Cape Town, April 2017. Collaboration with Katarina Britz and Tommie Meyer, 1 seminar given.
- Cardiff 1-week visit to Cardiff University, February 2017. Collaboration with Richard Booth, 1 seminar given.
- Unilu 2-week visit to the University of Luxembourg, February 2014. Collaboration with Richard Booth, 1 seminar given.
- IRISA 1-week visit to the IRISA laboratory in Rennes, France, January 2014. Collaboration with Guillaume Aucher and François Schwarzentruber, 1 seminar given.
- LORIA 1-week visit to the LORIA laboratory in Nancy, France, March 2013. Collaboration with Hans van Ditmarsch and Amedeo Napoli, 1 seminar given.
- RMIT 1-week visit to the Intelligent Agents group at the Royal Melbourne Institute of Technology, Australia, December 2012. Collaboration with Sebastian Sardina and Miquel Ramírez, 1 seminar given.
- Dagstuhl Invited to the Dagstuhl seminar on *Foundations and Challenges of Change and Evolution in Ontologies*, October and November 2012. <http://www.dagstuhl.de/12441>
- UniBolzano 1-month visit to the KRDB group at the Free University of Bolzano, Italy, May and June 2012. Collaboration with Enrico Franconi and Alex Borgida.
- UNSW 1-week visit to the University of New South Wales, Sydney, December 2011. Collaboration with Michael Thielscher, 1 seminar given.
- IRIT 3-week visit to the Institut de Recherche en Informatique de Toulouse and the Université de Toulouse 1 Capitole, France, May and June 2010. Collaboration with Andreas Herzig and Laurent Perrussel, 3 seminars given.
- CUNY 1-week visit to the Graduate Center of the City University of New York, USA, May 2010. Collaboration with Rohit Parikh, Sergei Artemov and Samir Chopra, 1 seminar given.
- CENTRIA 3-day visit to the Centro de Inteligência Artificial of the Universidade Nova de Lisboa, Lisbon, Portugal, April 2010. Collaboration with João Leite, 1 seminar given.



- UniBolzano 3-week visit to the KRDB group at the Free University of Bolzano, Italy, December 2009. Collaboration with Enrico Franconi.
- NICTA 3-week visit to the National ICT Australia, Sydney, September 2008. Collaboration with Tommie Meyer, Norman Foo, Abhaya Nayak, Maurice Pagnucco and Dongmo Zhang, 2 seminars given.
- international Representative of IRIT/CNRS at the South African–French Collaboration in ICT R&D (SAFETI), collaboration Somerset West, South Africa, March 2006.

### Participation in local organizing committees

- COMMA'08 The 2<sup>nd</sup> International Conference on Computational Models of Argument. Toulouse, France. Member of the local organizing committee. <http://www.irit.fr/comma08>
- ESSA'07 The 4<sup>th</sup> Conference of the European Social Simulation Association. Toulouse, France. Member of the local organizing committee. <http://essa2007.free.fr>
- WCP'03 The 3<sup>rd</sup> World Congress on Paraconsistency. Toulouse, France. Member of the local organizing committee. <http://www.cle.unicamp.br/wcp3>

## Courses and tutorials

- 2018 Week-long course on description logics at ESSLLI 2018, Sofia, Bulgaria, 2018.
- 2017 3h tutorial on defeasible reasoning for description logics at the 40<sup>th</sup> German AI Conference (KI), Dortmund, Germany, 25 September 2017.
- 2017 6h course on description logics, Université d'Artois, 12 March 2017.
- 2016 3.5h tutorial on description logics at IJCAI, New York, USA, 9 July 2016.
- 2015 3h tutorial on description logics at NAT@logic 2015, Natal, Brazil, 31 August – 1 September 2015. <https://sites.google.com/a/dimap.ufrn.br/natalogic-2015/home>
- 2013 4h tutorial on description logics at the 4<sup>th</sup> World Congress and School on Universal Logic (Unilog). Rio de Janeiro, Brazil, 29 March – 2 April 2013. <http://www.uni-log.org/start4.html>

## Teaching

- 2016-18 Object-oriented design and programming, undergraduate level. IUT de Lens, Université d'Artois, 2016, 2017, 2018.
- 2016-17 Algorithms and programming, undergraduate level. IUT de Lens, Université d'Artois, 2016, 2017.
- 2016-17 Databases, undergraduate level. IUT de Lens, Université d'Artois, 2016, 2017.
- 2016 Networks, undergraduate level. IUT de Lens, Université d'Artois, 2016.
- 2015 60h theory of computation, undergraduate level. Federal University of Rio de Janeiro, Brazil.
- 2015 60h description logics, undergraduate level. Federal University of Rio de Janeiro, Brazil.
- 2014 28h description logics, undergraduate level. Federal University of Rio de Janeiro, Brazil.
- 2011-2013 External reviewer for the module *Formal Logic*, undergraduate level. Department of Philosophy, University of South Africa.
- 2007–2008 90h databases, undergraduate level. Université de Toulouse 1, France.  
30h computer architecture and systems, graduate level. Université de Toulouse 1.  
72h introduction to computer science, undergraduate level. Université de Toulouse 1.
- 2006–2007 30h databases, undergraduate level. Université de Toulouse 1.  
45h introduction to computer science, undergraduate level. Université de Toulouse 1.  
27h productivity tools (Office, Web), undergraduate level. Université de Toulouse 1.
- 2005–2006 46h introduction to computer science, undergraduate level. Université de Toulouse 1.
- 2001–2002 60h computer programming, undergraduate level. Federal University of Paraná, Brazil.
- 1997–1999 165h object oriented programming, C, JAVA, Internet. Federal University of Paraná.

## Previous positions

- 2014–2015 **Professor**, *Department of Computer Science, Institute of Mathematics, Federal University of Rio de Janeiro*, Rio de Janeiro, Brazil.
- 2008–2014 **Post-doctoral researcher**, *CSIR Meraka Institute*, Pretoria, South Africa.  
Research in logic-based knowledge representation and reasoning in artificial intelligence.
- 2006–2008 **Lecturer**, *Université de Toulouse 1 Sciences Sociales*, Toulouse, France.  
Research in artificial intelligence. Teaching in databases, networks and computer science.
- 2002–2006 **Ph.D. candidate**, *Université Paul Sabatier*, Toulouse, France.  
Research in logic-based knowledge representation and reasoning in artificial intelligence.
- 2001–2002 **M.Sc. candidate**, *Federal University of Paraná*, Curitiba, Brazil.  
Research in artificial intelligence. Teaching in JAVA programming.
- 2000–2001 **Programmer analyst**, *CINQ Technologies*, Curitiba, Brazil.  
Development in C++ and JAVA.
- 1999–2000 **Network administrator**, *Federal University of Paraná*.  
Administration of Linux networks.
- Feb–July 1999 **Research assistant**, *Physics Department, Federal University of Paraná*.  
Internship at the weather forecast research group.

## Professional membership

- AAAI Member of the *Association for the Advancement of Artificial Intelligence*, 2011–2016.
- ACM Member of the *Association for Computing Machinery*, since 2009.

## Awards and grants

- CNPq Research fellow of the Brazilian National Research Council, from 2014 to 2015.
- NRF rating Rated by the South African National Research Foundation (NRF), Category Y, Level Y1, 2012.
- NRF grant Awardee of the NRF Incentive Funds for Rated Researchers, 2012. Total grant: 40,000 rands per year for 6 years.
- research award Winner of the *CSIR Meraka Emerging Researcher Award*, 2010. Prize: 5,000 rands.
- poetry award Winner of the contest *La francophonie dans tous ses états*, 2000. Organized by the French Embassy in Brazil. Prize: 2 week trip to France (*Francofolies de la Rochelle*).

## Leisure

- travel Traveling to 48 countries around five continents.
- interview Invited for an interview at the Araucária TV, Channel 23, Brazil. January 11<sup>th</sup> 2008.

## Last Update

December 30, 2017