

## Sander Beckers

### *Curriculum Vitae*

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## Employment

- 2016-2017 Visiting B.A.E.F. Fellow  
Department of Computer Science, Cornell University
- 2012-2016 Ph.D. in Computer Science, October 2016  
KULeuven - University of Leuven, Belgium  
*Dissertation: Actual Causation: Definitions and Principles*  
*Supervisors: Hendrik Blockeel and Joost Vennekens*
- 2013 Fall Visiting Researcher at Munich Center for Mathematical Philosophy
- 2010-2011 Researcher at University of Leuven, EAVISE research group  
*Project: S.O.S. OpenCL: Multicore Cooking*
- 2008-2009 (part-time) internship as actuary  
Fortis Insurance Belgium, Employee Benefits
- 2008 (part-time) internship as actuary  
Aon Benfield Belgium

## Education

<u>Program</u>	<u>Institution</u>	<u>Year</u>	<u>Result</u>
Master in Mathematics <i>Dissertation: Deductive Reasoning in Guarded FO(ID)</i> <i>Supervisor: Marc Denecker</i>	University of Leuven	2011	distinction
Bridge program Mathematics	University of Leuven	2008	
Master in Philosophy <i>Dissertation: Wittgenstein en het Ethische</i> <i>Supervisor: Arnold Burms</i> <i>2005: one semester abroad at Stellenbosch University, South Africa</i>	University of Leuven	2006	distinction
Bachelor in Philosophy	University of Antwerp	2004	distinction
European Baccalaureate	European School Mol (Belgium)	2001	80%

## Grants and Fellowships

- 2016-2017 Research Fellowship, Belgian American Educational Foundation
- 2012-2015 Ph.D. Grant for Fundamental Research, Flanders Innovation & Entrepreneurship

## Research

### Publications

Beckers, S., and Vennekens, J. (2017). The Transitivity and Asymmetry of Actual Causation, *Ergo*, 4(1), 1-27.

Beckers, S. (2017). AAAI: an Argument Against Artificial Intelligence, In *Proceedings of the 3rd International Workshop on AI, Ethics and Society*, forthcoming.

Beckers, S., and Vennekens, J. (2016). A Principled Approach to Defining Actual Causation, *Synthese*, forthcoming.

Beckers, S., and Vennekens, J. (2016). A General Framework for Defining and Extending Actual Causation using CP-logic, *International Journal for Approximate Reasoning*, 77: 105-126.

Beckers, S., and Vennekens, J. (2015). Towards a General Definition of Actual Causation Using CP-logic. In *Proceedings of the 2nd International Workshop on Probabilistic Logic Programming co-located with ICLP*, volume 1413 of *CEUR Workshop Proceedings*, 19–38.

Beckers, S., and Vennekens, J. (2015). Combining Probabilistic, Normative, and Causal Reasoning in CP-logic, In *Proceedings of the 12th International Symposium on Logical Formalizations of Commonsense Reasoning*, 32-38.

Beckers, S., and Vennekens, J. (2012). Counterfactual Dependency and Actual Causation in CP-logic and Structural Models: a Comparison. In *Proceedings of the Sixth STAIRS*, volume 241 of *Frontiers in Artificial Intelligence and Applications*, 35–46.

Beckers, S., De Samblanx, G., De Smedt, F., Goedemé, T., Struyf, L., and Vennekens, J. (2012). Parallel hybrid SAT solving using OpenCL. In *Proceedings of Benelux Conference on Artificial Intelligence*, 11-18.

Beckers, S., De Samblanx, G., De Smedt, F., Goedemé, T., Struyf, L., and Vennekens, J. (2011). Parallel SAT-solving with OpenCL. In *Proceedings of the IADIS International Conference on Applied Computing*, 435-441.

### Talks

2017 'AAAI: an Argument Against Artificial Intelligence', European Conference for Analytic Philosophy, Munich, Germany

2017 'Formal Ethics', Invited talk, Center for Human-Compatible AI, UC Berkeley

2017 'AAAI: an Argument Against Artificial Intelligence', AAAI Workshop on AI, Ethics and Society, San Francisco

2016 'The Transitivity and Asymmetry of Actual Causation', Philosophy of Science in a Forest, Doorn, the Netherlands

2015 'A Principled Approach to Defining Actual Causation', Conference of Logic, Methodology and Philosophy of Science, Helsinki, Finland

2015 'A Principled Approach to Defining Actual Causation', Invited talk, Tilburg Center for Logic, Ethics, and Philosophy of Science, the Netherlands

- 2015 'The Problem of Actual Causation', Epistemology Reading Group, Department of Linguistics and Philosophy, MIT
- 2015 'Combining Probabilistic, Causal, and Normative Reasoning using CP-logic', AAAI Spring Symposium: Commonsense Reasoning, Stanford University
- 2014 'Actual Causation using CP-logic', Declarative Languages and AI seminar, University of Leuven, Belgium
- 2013 'Actual Causation using CP-logic', colloquium, Munich Center for Mathematical Philosophy
- 2013 'Dual Inheritance Theory as an Integration of Biology and the Humanities', Reduction and Emergence in the Sciences conference, Munich Center for Mathematical Philosophy
- 2013 'A Pragmatic Approach to Causality', OZSW conference, University of Rotterdam
- 2013 'Actual Causation: the CP-logic Approach', Invited talk, INRIA, Grenoble, France
- 2013 'Actual Causation in Cases of Preemption: the CP-logic Approach', Graduate Conference in Theoretical Philosophy, University of Groningen, the Netherlands
- 2013 'Actual Causation in Cases of Preemption: the CP-logic Approach', Center for Logic and Analytic Philosophy colloquium, University of Leuven, Belgium
- 2012 'Actual Causation in Cases of Preemption: the CP-logic Approach', Great Plains Graduate Conference in Philosophy, Kansas University
- 2012 'Counterfactual Dependency and Actual Causation in CP-logic and Structural Models: a Comparison', STAIRS conference, Montpellier, France
- 2012 'Parallel hybrid SAT solving using OpenCL', BNAIC, Maastricht University, the Netherlands
- 2012 'Parallel hybrid SAT solving using OpenCL', Declarative Languages and AI seminar, University of Leuven, Belgium
- 2011 'Parallel SAT-solving with OpenCL', IADIS, Rio de Janeiro, Brazil

## **Teaching**

Undergraduate program Civil Engineering, exercise classes:

- 2014-2015 Introduction to Programming: Python
- 2012-2013 Introduction to Programming: Java

Undergraduate program Industrial Engineering, exercise classes:

- 2015: Introduction to the IDP knowledge base system
- 2014-2015 Introduction to Programming: Python
- 2010-2013 Introduction to Programming: C