

Sander Beckers

Curriculum Vitae

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Employment

- 2019-2021 Humboldt Postdoctoral scholar (supervisor: Stephan Hartmann)
Munich Center for Mathematical Philosophy, LMU
- 2018-2019 Postdoctoral scholar (supervisor: Jan Broersen)
Reins project: <https://responsibleintelligentsystems.sites.uu.nl>
Department of Philosophy and Religious Studies, Utrecht University
- 2017 Fall Visiting postdoctoral scholar (supervisor: James Conant)
Institute of Philosophy, Leipzig University
- 2016-2017 Visiting B.A.E.F. Fellow (supervisor: Joe Halpern)
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 doctoral researcher (host: Stephan Hartmann)
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

2019-2021	Humboldt Research Fellowship for Postdoctoral Researchers
2016-2017	Research Fellowship, Belgian American Educational Foundation
2012-2015	Ph.D. Grant for Fundamental Research, Flanders Innovation & Entrepreneurship

Research

Publications

- Beckers, S. (2018). AAAI: an Argument Against Artificial Intelligence, In Vincent C. Müller (ed.), *Philosophy and Theory of Artificial Intelligence 2017*, (SAPERRE; Berlin: Springer), 235-247.
- Beckers, S., and Vennekens, J. (2018). A Principled Approach to Defining Actual Causation, *Synthese*, 195(2), 835-862.
- Beckers, S., and Vennekens, J. (2017). The Transitivity and Asymmetry of Actual Causation, *Ergo*, 4(1),1-27.
- 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.

Conference papers

- 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. (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

- 2018 'Applying Causal Modeling to Philosophical Issues', Invited talk, Logic and Metaphysics Workshop, CUNY
- 2018 'Causation and the Principle of Alternative Possibilities', Causes, Norms, and Decisions Workshop, Hannover, Germany
- 2017 'A Formal Approach to Frankfurt-style Cases', OZSW conference, Doorn, the Netherlands

- 2017 'AAAI: an Argument Against Artificial Intelligence', Philosophy and Theory of Artificial Intelligence, Leeds, UK
- 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

University of Leuven

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

Utrecht University

Undergraduate program Philosophy, tutorials:

2018-2019: Logic for philosophers

2018-2019: Epistemology and Philosophy of Science

Undergraduate program in Artificial Intelligence, lectures:

2018: Introduction to Statistics

Master in Artificial Intelligence, tutorials:

2018: Philosophy of AI

Master in Artificial Intelligence, two guest lectures:

2018-2019: Philosophy of AI