# 1 Short Curriculum Vitae (2-page resume)

### Personal Information

Family name, First name: Benzmüller, Christoph Ewald ORCID ID: 0000-0002-3392-3093

Title(s): Prof. Dr. habil. Nationality: German

### Education

07/1999-07/2007 Habil., Dep. of Computer Science, Saarland University, Saarbrücken, DE

04/1995–07/1999 Dr., Dep. of Computer Science, Saarland University, DE

10/1989-04/1995 Dipl.-Inform., Dep. of Computer Science, Saarland University, DE

#### **Current and Previous Positions**

since 07/2018 Professor, Artificial Intelligence (AI), Freie Universität (FU) Berlin, DE

since 03/2017 Visiting Scholar and Scientific Collaborator in AI, FSTC, University of Luxembourg, LU
2015–2016 Visiting Scholar, CSLI/Cordula Hall, Philosophy, Stanford University, CA, US
2012–2017 Heisenberg Fellow of the Deutsche Forschungsgemeinschaft (DFG), FU Berlin, DE

since 02/2012 Privatdozent, Computer Science and Mathematics, FU Berlin, DE

2008–2011 Senior Researcher, DFG research grant, Articulate Software, Angwin, CA, US

2008–2009 Full Professor (tenured) for Formal Methods and AI, Intl. University in Germany, Bruchsal, DE

2006–2007 Senior Research Fellow, Dep. of Computer Science, University of Cambridge, GB
since 08/2007 Privatdozent, Venia Legendi in Computer Science, Saarland University, DE
2001–2008 Associate Professor (C2/C1), Dep. of Computer Science, Saarland University, DE
2000–2001 PostDoc, AI and Computer Science, The Universities of Birmingham and Edinburgh, GB

1995–1999 Researcher, Dep. of Computer Science, Saarland University, DE

## Awards and Honors (selection)

2019 Appointed as National Contact Point in Germany of CLAIRE AI Network https://claire-ai.org

2018 John-Jules Meyer Best Paper Award at DEON 2018 conference

2018 DFG mentor for 30th European Union Contest for Young Scientists (EUCYS) in Dublin

2012–2017 Heisenberg Fellowship, German National Research Foundation (DFG)

2015/2016 Central teaching award of FU Berlin for lecture on Computational Metaphysics

2014 Shortlist for Amalia Preis für Neues Denken, Weimar
1996–1998 PhD scholarship of the Studienstiftung des Deutschen Volkes

### Teaching and Supervision (selection)

Lecture courses: Artificial Intelligence, Universal Logical Reasoning, Computational Metaphysics, Expressive Logics, Automated Theorem Proving, Semantics, Mathematical Assistance Systems, Question Answering Systems; Seminars: Normative Reasoning & Machine Ethics, Gödel's Philosophical Views, Intelligent Learning and Tutoring Systems; Supervision: Served as supervisor, co-supervisor, committee member or mentor of  $\geq 25$  PhD projects,  $\geq 23$  MSc/Diploma projects and  $\geq 17$  BSc projects in Computer Science, Mathematics and Philosophy. A recent highlight is the PhD thesis of Dr. Alexander Steen ( $\geq 25$  publications, summa cum laude, awarded with a GI-Junior-Fellowship).

## Organisation of Scientific Events and Experience as Publisher (small selection)

Conference on Intelligent Computer Mathematics (CICM 2020, co-chair), German Conference on Artificial Intelligence (KI 2019, co-chair), LuxLogAI conference with public debate on AI & Ethics at KPMG (2018, Luxembourg, co-organiser), Intl. Joint Conference on Rules and Reasoning (RuleML+RR 2018, co-chair), Global Conference on Artificial Intelligence (GCAI 2016, 2017, co-chair), Conference on Automated Deduction (CADE 2015, organiser), Automated Reasoning in Quantified Non-Classical Logics (ARQNL 2014, 2016, 2018, 2010, co-chair/co-organiser)

# Commissions of Trust (small selection)

 ${\bf Jury:}\ {\bf Kurt}\ {\bf G\ddot{o}del}\ {\bf Preis}\ 2019,\ {\bf Kurt}\ {\bf G\ddot{o}del}\ {\bf Freundeskreis},\ {\bf Berlin}$ 

Reviewer: DFG (DE), Austrian Science Fund (AT), Johannes Kepler Universität Linz (AT), Cambridge University (GB), King's College (GB), Czech Science Foundation (CZ), Nat. Sciences and Engineering Research Council of Canada (CA), Recherche en sciences & technologies de l'information (FR)

Editorial board: Logic J. of the IGPL, J. of Applied Logics—IfCoLoG J. of Logics and their Applications

## Memberships of Scientific Societies (selection)

2019-ongoing Conference on Intelligent Computer Mathematics (CICM), steering committee Confederation of Laboratories for AI Research in Europe (CLAIRE), key supporter 2018-ongoing Society of Deontic Logic and Normative Systems (DEON), steering committee 2018-ongoing 2018-ongoing Berlin Mathematical School (BMS+) 2008–2011, 2015–ongoing Conference on Automated Deduction (CADE), elected trustee, vice-president 2015-ongoing Association of Automated Reasoning (AAR), board member representing CADE 2014-2018 Spokesman of the section Deduction Systems of the Gesellschaft für Informatik, DE 2014-2016 Berlin Mathematical School (BMS), mentoring, gender and diversity committee 2010-ongoing The International Federation for Computational Logic (IfCoLoG), executive board

## Record of Third-Party Funded Projects (selection)

- CRAP (Volkswagen Stiftung, €120.000, 2018–2019): Consistent Rational Argumentation in Politics, PI
- Verifiable Smart Contract Language, BILLON SP. Z O.O., Warsaw (2018), PI
- Trustful AI in Energy Production (Innovations region Lausitz GmbH, Cottbus, approx. 50.000€, 2018), co-PI
- Leo-III (DFG, BE 2501/11, €276,218, 2014–2018): Effective HO Automated Theorem Proving, PI
- CompMeta (FU Berlin central teaching award, €10.000, 2016): Lecture Course on Computational Metaphysics, PI

User Interfaces for Theorem Provers, permanent steering committee member

- CADE-25 (DFG, BE 2501/12, €21.600, 2015): Conference Support Grant for CADE-25 in 2015 in Berlin, PI
- Heisenberg fellowship (DFG, BE 2501/9, ~€310.000, 2012–2017): Studies in Computational Metaphysics, PI
- ONTOLEO (DFG, BE 2501/6, ~€102.000, 2009–2011): Cooperative HO ATP for Ontology Reasoning, PI
- THFTPTP (EU FP7-PEOPLE, 219982, ~€130,000, 2008–2009): Intl. Infrastr. for the Automation of HO Logic, PI
- OMEGA (DFG SFB378, MI-04, ~€900,000, 2001-2008): Agent-oriented Proof Planing, co-PI
- DIALOG (DFG SFB378, MI-03, ~€900,000, 2001-2008): NL-based Interact. with Maths Assistance Systems, co-PI
- LEO-II (EPSRC—EP/D070511/1, 2006–2007): LEO II: An Effective Higher-Order Theorem Prover, PostDoc
- CALCULEMUS (EU FP5—HPRN-CT-2000-00102, 2000-2004): Research Training Network, co-coordinator

## International Network of Collaborators (small selection, past and present)

Universal Logical Reasoning and Computational Metaphysics: • Edward Zalta, Stanford U, US • Walter Carnielli, U Campinas, BR • Bruno Woltzenlogel-Paleo, ANU Canberra, AU Normative Reasoning and Ethical Intelligent Systems: • Leon van der Torre, Xavier Parent, Martin Theobald, U Luxembourg, LU • Toby Walsh, UNSW Sydney, AU • Beishui Liao, Zhejiang U, CH History and AI: • Jessica Gienow-Hecht, JFK-Institut, FU Berlin, DE Automated and Interactive Theorem Proving: • Geoff Sutcliffe, U Miami, US • Stephan Schulz, DHBW Stuttgart, DE • Larry Paulson, U Cambridge, GB • Jens Otten, U Oslo, NO • Alexander Leitsch, TU Wien, AUT • Jasmin Blanchette, Vrije U Amsterdam, NL • Chad Brown, Czech TU in Prague, CZ • Frank Pfenning, CMU, US Robotics and Machine Learning: • Raul Rojas, Daniel Göhring, Tim Landgraf, FU Berlin AI Ontologies: • Adam Pease, InfoSys, US Foundations of Maths: • Peter Andrews, CMU, US • Dana Scott, U Berkeley, CA, US

## Publications & Keynotes in AI, Computer Science, Philosophy, Mathematics (highlights)

AI: J. of Automated Reasoning, IJCAI, ECAI, IJCAR, CADE, LPAR, AI Magazine; Keynotes: AI in Automotive, Humans vs. Non-Humans (Goethe Institut São Paulo), KI: Made in Germany (DLR), Panel Discussion on AI (Nature Research), Laws in LAWS (Future of Life Institute), Bundeszentrale für politische Bildung, TABLEAUX conference Computer Science; J. of Web Semantics, Science of Computer Programming, Logical Methods in Computer Science, J. of Universal Computer Science, J. of Applied Logic, Formal Aspects of Computing Science, Intl. J. of Computing Anticipatory Systems; Keynotes: OEB Plenary Debate, Brazilian Symp. on Formal Methods, Computability in Europe, URANIA Public Event Berlin, SMT WS, Shared Services and Outsourcing Woche, WS on Algebr. Developm. Techniques Philosophy: Stanford Encyclop. of Philosophy, Handbook of the History of Logic, Open Philosophy, Review of Symbolic Logic, J. Philosophical Logic, Synthese, Logic J. of the IGPL, J. Bhaktivedanta Institute, Logica Universalis, Logic and Logical Philosophy; Keynotes: DEON conference, All India Students' Conf. on Science and Spiritual Quest, World Congress on Logic & Religion, Formal Methods & Science in Philosophy, Colloq. for Philosophy & History of Formal Sciences Mathematics: J. of Symbolic Logic, Ann. of Mathematics and Artificial Intelligence, Teaching Mathematics and Com-

#### Career Breaks

2006-ongoing

2009–2010 12 months parental leave after birth of my son

2011–2012 3 months parental leave after birth of my twin daughters + 2 months care service for terminally ill mother

puter Science; Keynotes: Berliner Mathematische Gesellschaft, Colloquium of the Berlin Mathematical School