

CONTACT
INFORMATION

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EMPLOYMENT

University of Bergen, Associate Professor, June 2017 -

University of Bergen, Postdoctoral Fellow, June 2013 - June 2017

University of Liverpool, Research Associate, May 2012 - May 2013

University of Luxembourg, Research Assistant, March 2008 - March 2012

SKF, Research and Development Göteborg, Developer, February 2004 - March 2005

PBS, Malta, Assistant system administrator, July 2002 - September 2003

EDUCATION

University of Luxembourg, Docteur en informatique, Computer science, January 2012

Vienna University of Technology, Austria

Free University of Bozen-Bolzano, Italy Joint M.Sc., Master in Computer Science, October 2007

“Ss. Cyril and Methodius” University of Skopje, Macedonia, Diploma in electrical engineering, Computer technology, IT and Control Systems, June 2005

ACADEMIC
ACTIVITIES

• Scientific Event Organisation

- Dagstuhl Seminar - Engineering moral agents: Viable Ethics for Autonomous Systems, April 2019
- Video Competition @ IJCAI 2018 July 13-19, 2018, Stockholm, Sweden
- ISAIM special session on Formalising Robot Ethics January 3-5, 2018 Florida, USA
<http://isaim2018.cs.virginia.edu/>
- Dagstuhl Seminar Engineering Moral Agents - from Human Morality to Artificial Morality, May 2016
<http://www.dagstuhl.de/16222>
- Dagstuhl Seminar JA4AI – Judgment Aggregation for Artificial Intelligence, 2014
<http://www.dagstuhl.de/14202>
- Local Organiser LOFT 2014 <http://folk.uib.no/nmita/LOFT11/About.html>
- Program and Local Organiser Chair “Judgment Aggregation Computational Perspectives Workshop” Luxembourg, February 2012 <http://icr.uni.lu/JAWorkshop/>
- Student Session Chair *ESSLLI’10* European Summer School in Logic, Language, and Information 2010, <https://marija.gforge.uni.lu/esslli2010.html>
- Student Session Co-chair *ESSLLI’09* European Summer School in Logic, Language, and Information 2009,
<http://web.stanford.edu/~icard/esslli/>

- **Invited Talks(latest)**

- *Who's a bad robot*
Workshop on Verification and Validation of Autonomous Systems: Ethical, Social and Trustworthy behaviour, An EPSRC funded UK network, **November, 2017**
- *Iterative Judgment Aggregation*
From Shared Evidence to Group Attitudes (SEGA), University of **Bayreuth, March, 2017**. Workshop webpage: <https://goo.gl/qpdxLG>
- *Information Leakage in Social Networks*
LogiCIC Workshop, University of **Amsterdam, November, 2016**.
Workshop webpage: <https://logicicworkshop2016.wordpress.com/>
- *Future Directions of Judgment Aggregation*
Workshop on Future Directions of Computational Social Choice, Hungary Academy of Sciences **Budapest, November, 2016**.
Workshop webpage: <http://econ.core.hu/english/res/FutureCOMSOC.html>
- *Machine Ethics*
LAMAS SING Workshop, **Gdansk, September, 2016**.
Workshop webpage: <http://krak.ipipan.waw.pl/~wjamroga/lamassing2016/program.php>
- *An Abstract Formal Basis for Digital Crowds*
CADILLAC Workshop, Formal Models of Social Phenomena, **Copenhagen, May, 2016**
Workshop webpage: <https://cadillac.compute.dtu.dk/> —

- **Invited Tutorials**

- *Multi-agent systems and social influence* @ AAMAS July, 2018
- *Engineering Machine Ethics, August 2017*
19th European Agent Systems Summer School
<http://easss2017.ipipan.waw.pl/>
- *Introduction to Judgment Aggregation for Multi-Agent Systems, July 2016*
18th European Agent Systems Summer School
http://easss2016.dmi.unict.it/?page_id=217
- *Judgement Aggregation: An Overview, 2014*
Dagstuhl Seminar 14332, Formal Methods for Coordinating Multi-Agent Systems
<http://www.dagstuhl.de/14332>

- **Reviewing work**

- Conferences (selection): [AAAI](#), [IJCAI](#), [ECAI](#), [AAMAS](#).
- Journals (selection): Journal of Artificial Intelligence, Journal of Autonomous Agents and Multi-Agent Systems, Journal of Logic and Computation.

GRANTS,
SCHOLARSHIPS
AND AWARDS

- COST ACTION IC1205 (Computational social choice) short-term scientific mission grant, 2013, 2015 and 2016. (~ 7000 Euro total)
- COST ACTION IC0801 (Agreement technologies) short-term scientific mission grant, 2010, 2011 and 2012. (~ 5000 Euros total)
- Erasmus Mundus Scholarship (2005–2007) (42.000 Euro.)

JOURNALS

- L. Lang, P. Pigozzi, M. Slavkovik, L. van der Torre, and S. Vesic. A partial taxonomy of judgment aggregation rules, and their properties. *Social Choice and Welfare*, 48:1–30, November 2016.
- L.A. Dennis, M. Fisher, M. Slavkovik, and M. Webster. Formal verification of ethical choices in autonomous systems. *Robotics and Autonomous Systems*, 77:1 – 14, 2016
- M. Slavkovik, L. Dennis, and M. Fisher. An abstract formal basis for digital crowds. *Distributed and Parallel Databases*, 33(1):3–31, 2015
- M. Slavkovik and G. Boella. Recognition-primed group decisions via judgement aggregation. *Synthese*, 189(1):51–65, 2012
- M. de Boer, D. Gabbay, X. Parent, and M. Slavkovik. Two dimensional standard deontic logic (including a detailed analysis of the 1985 Jones-Pörn deontic logic system). *Synthese*, pages 1–38, 2011

REVIEWED
CONFERENCE
PROCEEDINGS

- S. Dyrkolbotn, T. Pedersen, and M. Slavkovik. On the distinction between implicit and explicit ethical agency. In *AAAI/ACM Conference on Artificial Intelligence, Ethics and Society*, New Orleans, USA, 2018. forthcoming
- V. Dignum, M. Baldoni, C. Baroglio, M. Caon, R. Chatila, L.A. Dennis, G. Génova, M. Kließ, M. Lopez-Sanchez, R. Micalizio, J. Pavón, M. Slavkovik, M. Smakman, M. van Steenberg, S. Tedeschi, L. van der Torre, S. Villata, T. de Wildt, and G. Haim. Ethics by design: necessity or curse? In *AAAI/ACM Conference on Artificial Intelligence, Ethics and Society*, New Orleans, USA, 2018. forthcoming
- E. Pires Bjørgen, S. Øvervatn Madsen, T. Skaar Bjørknes, F. Vonheim Heimsæter, R. Håvik, M. Linderud, P.N. Longberg, L.A. Dennis, and M. Slavkovik. Cake, death, and trolleys: dilemmas as benchmarks of ethical decision-making. In *AAAI/ACM Conference on Artificial Intelligence, Ethics and Society*, New Orleans, USA, 2018. forthcoming
- M. Caycedo Alvarez, Ø. S. Berge, A. S. Berget, E. S Bjørknes, D.V.K. Johnsen, F. O. Madsen, and M. Slavkovik. Implementing Asimov’s first law of robotics. *Norsk Informatik konferanse*, 2017
- D. Valland, T. A. Carlsen, M. Lea, A. Pensgaard, S. Karlsen, P. Sotov, and M. Slavkovik. The Norwegian oil fund investment decider N.O.F.I.D. *Norsk konferanse for organisasjoners bruk av IT*, 25(1), 2017
- T. Pedersen and M. Slavkovik. Formal models of conflicting social influence. In B. An, A.L.C. Bazzan, J. Leite, S. Villata, and L. van der Torre, editors, *PRIMA 2017: Principles and Practice of Multi-Agent Systems - 20th International Conference, Nice, France, 2017, Proceedings*, page Forthcoming. Springer, 2017
- R. de Haan and M. Slavkovik. Complexity results for aggregating judgments using scoring or distance-based procedures. In *Proceedings of the 2017 International Conference on Autonomous Agents & Multiagent Systems*, AAMAS ’17, pages 952–961. ACM, 2017
- M. Slavkovik and W. Jamroga. Iterative judgment aggregation. In *ECAI 2016 - 22nd European Conference on Artificial Intelligence, 29 August-2 September 2016, The Hague, The Netherlands - Including Prestigious Applications of Artificial Intelligence (PAIS 2016)*, pages 1528–1536, 2016

- J. Lang, M. Slavkovik, and S. Vesic. Agenda separability in judgment aggregation. In *Proceedings of the Thirtieth AAAI Conference on Artificial Intelligence, February 12-17, 2016, Phoenix, Arizona, USA.*, pages 1016–1022, 2016
- J. Lang and M. Slavkovik. How hard is it to compute majority-preserving judgment aggregation rules? In *Proceedings of the 21st European Conference on Artificial Intelligence*, volume 263:ECAI 2014 of *Frontiers in Artificial Intelligence and Applications*, pages 501–506, 2014
- M. Slavkovik and T. Ågotnes. A judgment set similarity measure based on prime implicants. In *Proceedings of the 2014 International Conference on Autonomous Agents and Multi-agent Systems, AAMAS '14*, pages 1573–1574, Richland, SC, 2014. International Foundation for Autonomous Agents and Multiagent Systems
- J. Lang, G. Pigozzi, M. Slavkovik, and L. van der Torre. Judgment aggregation rules based on minimization. In *Proceedings of the 13th Conference on Theoretical Aspects of Rationality and Knowledge, TARK XIII*, pages 238–246, NY, USA, 2011. ACM

BOOKS & CHAPTERS

- M. Lujak and M. Slavkovik. A modified vickrey auction with regret minimization for uniform alliance decisions. In M. Ivanović, C. Bădică, J. Dix, Z. Jovanović, M. Malgeri, and M. Savić, editors, *Intelligent Distributed Computing XI*, pages 61–72. Springer International Publishing, Cham, 2018
- L. Dennis, M. Slavkovik, and M. Fisher. "How Did They Know?" - Model-checking for Analysis of Information Leakage in Social Networks. In *Coordination, Organizations, Institutions and Norms at the European Conference on Artificial Intelligence 2016 COIN@ECAI2016*, page to appear, 2016
- M. Slavkovik and T. Ågotnes. Measuring dissimilarity between judgment sets. In *Logics in Artificial Intelligence*, volume 8761 of *Lecture Notes in Computer Science*, pages 609–617. Springer International Publishing, 2014
- L. Dennis, M. Fisher, M. Slavkovik, and M. Webster. Ethical choice in unforeseen circumstances. In A. Natraj, S. Cameron, C. Melhuish, and M. Witkowski, editors, *Towards Autonomous Robotic Systems*, volume 8069 of *Lecture Notes in Computer Science*, pages 433–445. Springer Berlin Heidelberg, 2014
- W. Jamroga and M. Slavkovik. Some complexity results for distance-based judgment aggregation. In S. Cranefield and A. Nayak, editors, *26th Australasian Joint Conference, Dunedin, New Zealand, December 1-6, 2013. Proceedings*, volume 8272 of *Lecture Notes in Computer Science*, chapter AI 2013: Advances in Artificial Intelligence, pages 313–325. Springer International Publishing, Cham, 2013
- J. Lang and M. Slavkovik. Judgment aggregation rules and voting rules. In *Proceedings of the 3rd International Conference on Algorithmic Decision Theory (ADT 2013)*, volume 8176 of *Lecture Notes in Artificial Intelligence*, pages 230–244. Springer-Verlag, 2013
- D. Lassiter and M. Slavkovik, editors. *New Directions in Logic, Language and Computation - ESSLLI 2010 and ESSLLI 2011 Student Sessions. Selected Papers*, volume 7415 of *Lecture Notes in Computer Science*. Springer, 2012
- G. Boella, G. Pigozzi, M. Slavkovik, and L. van der Torre. Group intention is social choice with commitment. In M. De Vos, N. Fornara, J. Pitt, and G. Vouras, editors, *Coordination, Organizations, Institutions, and Norms in Agent Systems VI*, volume 6541 of *Lecture Notes in Computer Science*, pages 152–171. Springer Berlin Heidelberg, 2011