

Curriculum vitae

PERSONAL INFORMATION

Steven Umbrello

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🌐 <https://www.linkedin.com/in/stevenumbrello/>

💬 Skype Steven.Umbrello

📅 **Date of birth** 05/01/1993 | **Nationality** Canadian, Italian

EDUCATION AND TRAINING

2018–Present

Doctor of Philosophy (PhD)

University of Turin, Torino (Italy)

- **Philosophy (Consortium FINO) - Department of Excellence (DFE)**
 - Scholarship: *Role of Philosophy in Understanding the Digital World* (UNITO)
 - Dissertation: *Towards a Value Sensitive Design Framework for Attaining Meaningful Human Control of Autonomous Weapons System*
 - Dissertation Language: English
 - Supervisor: Maurizio Balistreri (UNITO)

01/09/2016–28/11/2018

Master of Science (MSc)

University of Edinburgh, Edinburgh (United Kingdom)

- Epistemology, Ethics and Mind
- Dissertation: *Imaginative Value Sensitive Design: How Moral Imagination Exceeds Moral Law Theories in Informing Responsible Innovation*
- Dissertation Language: English
- Supervisor: Emma C. Gordon

01/09/2017–10/10/2018

Master of Arts (MA)

York University, Toronto (Canada)

- Science and Technology Studies
- Major Research Project: *Safe-(for whom?)-by-Design: Adopting a Posthumanist Ethics for Technology Design*
- Dissertation Language: English
- Supervisor: Daniel McArthur

01/09/2011–01/06/2016

Honours Bachelors of Arts (HBA) with Distinction

University of Toronto, Toronto (Canada)

- Philosophy (Maj.),
- Philosophy of Science (Min.),
- Classical Civilizations (Min.).

WORK EXPERIENCE

01/04/2016–Present

Managing Director

Institute for Ethics and Emerging Technologies

- Independent research on the design and ethics of transformative, emerging technologies.
- Spearheaded the rebranding of the IEET as well as the reformulation of the essential duties of the Board of Trustees, Board of Directors, and the Advisory Board.
- Submission editor and organizational development.

21/10/2019–Present **Expert consultant**

Ethical Intelligence Associates Ltd.
<https://www.ethicalintelligence.co/>

- providing consultancy for companies to gain a competitive edge by mitigating ethical risks and formulating custom tools and protocols to embed ethics into their practices that align with current ethical guidelines and company values.

01/01/2013–06/11/2018 **Junior Associate**

Global Catastrophic Risk Institute

- Nanotechnology research.
- Provided overall organizational development.

01/06/2015–01/06/2018 **Advisory Board Member**

Institute for Ethics and Emerging Technologies

01/06/2015–01/06/2017 **Affiliate Scholar**

Transhumanity.Net

01/08/2015–01/08/2017 **Associate Review Board Member**

Transhuman Policy Centre

- Provided nonpartisan guidance to the public and politicians regarding issues that affect everyone in the form of policy briefs and approved policy center papers.

01/12/2015–01/02/2017 **Policy Coordinator - Americas**

Global Healthspan Policy Institute

- Participated as an institute pioneer in securing assets and experts to support biogerontological and bioethics public policy.

01/10/2015–01/04/2016 **Assistant Managing Director**

- Assisted Managing Editor with submissions and organizational administration.

01/10/2014–01/07/2015 **Intern**

Richard Dawkins Foundation for Reason & Science

- Social-media promotion of scientific and humanist news.

PERSONAL SKILLS

Mother tongue(s) English

Foreign language(s)

| UNDERSTANDING | | SPEAKING | | WRITING |
|---------------|---------|--------------------|-------------------|---------|
| Listening | Reading | Spoken interaction | Spoken production | |

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|---------|----|----|----|----|----|
| Italian | B1 | B1 | B2 | B2 | A2 |
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Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

Teaching Experience

Course/Exam Evaluator - *Alta University* (Jan 2019 - Present)

- Aristotle (evaluator)

Guest Lecturer - Università degli Studi di Torino (May 2019)

- Responsible Innovation & Technology Dynamics

Guest Lecturer - Università della Calabria (April 2019)

- Responsible Innovation in Industry and Technology

Teaching Assistant - *York University* (Sept 2017 - June 2018)

- NATS 1775: Technology and Civilization, Grader.
- NATS 1920: Nature and Growth of Mathematics, Grader.

English Teacher - *Green High School* (May 2016 - Aug 2016)

- ENG4U: English, Grade 12, University Preparation. Designed and Taught Course.

Course Developer - *High Park Academy* (May 2016 - June 2016)

- HZB3M (Web): Philosophy: The Big Questions, Grade 11. Designed Course.
- HZT4U (Web): Philosophy: Questions and Theories, Grade 12. Designed Course.

Research Interests

- Value Sensitive Design/Responsible Innovation of Transformative Technologies
- Anticipatory Governance Strategies for Emerging Technologies
- Conceptual Issues of Atomically Precise Manufacturing/Molecular Manufacturing
- The Philosophy of Emerging Technologies and Post/Transhumanism

Editorial Duties

Current Roles

- Associate Editor - *Science and Engineering Ethics* - 2019
- Associate Editor - *International Journal of Technoethics*, 2018 - Present
- Book Reviews Editor, *Prometheus: critical studies in innovation*, 2018 - Present
- Section Editor, *Informatica*, 2018 - Present
- Editorial Board Member, *Delphi: Interdisciplinary Review of Emerging Technologies*, 2019 - Present
- Editorial Board Member, *International Journal of Systems and Society (IJSS)*, 2019 - Present
- Editorial Board Member, *International Journal of Sociotechnology and Knowledge Development (IJSKD)*, 2019 - Present
- Editorial Board Member, *Humanities and Social Science*, 2017 - Present
- Advisory Board Member, *Knowledge Futures: Interdisciplinary Review of Futures Studies*, 2017 - Present

Past Roles

- Editorial Review Board Member, *International Journal of Technoethics*, 2017 - 2018
- Guest Editor, *Between the Species: Journal of Philosophy and Animals*, special issue on Animal

Enhancement, 2018

Peer Reviews

Notation: Journal Name (year of reviews: number of reviews in that year)

* Denotes peer reviews for edited collections

To the reader: I include the number of reviews to promote more professional credit being given for performing peer reviews. I encourage others to do the same on their curriculum vitae.

Verified *journal* reviews can be accessed via [Publons](https://publons.com/a/1309836) <https://publons.com/a/1309836>

AI & Society (2018:2; 2019:1)

**Artificial Intelligence Safety and Security* [CRC Press] (2017: 6)

Axiomathes (2018:1)

Contingent Horizons (2017:1)

Delphi - Interdisciplinary Review of Emerging Technologies (2019:2)

Engineering Reports (2019:1)

Futures (2017:2; 2019:1)

International Journal of Art, Culture and Design Technologies (2018:1; 2019:2)

International Journal of Sociotechnology and Knowledge Development (2018:2; 2019:3)

International Journal of Strategic Engineering (2018:1)

International Journal of Systems and Society (2019:1)

International Journal of Technoethics (2017:3; 2018:1)

Intersect: The Stanford Journal of Science, Technology, and Society (2018:1)

Journal of Consciousness Studies (2019:1)

Journal of Critical Realism (2018:10; 2019:3)

Journal of Evolution and Technology (2015:1; 2017:2; 2018:1)

Journal of Military Ethics (2018:2)

Journal of Posthuman Studies (2018:5; 2019:2)

Journal of Responsible Innovation (2017:2; 2018:1)

Journal of Science Communication (2018:1)

NanoEthics (2019:4)

Philosophy & Technology (2019:1)

Physica Scripta (2019:1)

Science and Engineering Ethics (2018:7; 2019:9)

TECNOSCIENZA: Italian Journal of Science & Technology Studies (2017:1)

The International Journal of Technology, Knowledge, and Society (2018:1)

Academic Publications

Journal Articles

Umbrello, Steven, 2020. "[Imaginative Value Sensitive Design: Using Moral Imagination Theory to Inform Responsible Technology Design.](#)" *Science and Engineering Ethics*, Vol. 25, No. 3, 1-21, forthcoming. DOI: 10.1007/s11948-019-00104-4

Umbrello, Steven; Torres, Phil, and Angelo F. De Bellis, 2020. "[The Future of War: The Ethical Potential of Leaving War to Lethal Autonomous Weapons.](#)" *AI & Society*, Forthcoming. DOI: 10.1007/s00146-019-00879-x

Umbrello, Steven, 2019. "[Steps to Designing AI Empowered Nanotechnology: A Value Sensitive Design Approach.](#)" *Delphi: Interdisciplinary Review of Emerging Technologies*, Vol. 2, No. 2, 79-83. DOI: 10.21552/delphi/2019/2/6

Umbrello, Steven, 2019. "Explorative Nanophilosophy as Tecnoscienza: An Italian Perspective on the Role of Speculation in Nanoindustry." *TECNOSCIENZA: The Italian Journal of Science and Technology Studies*, Vol 10, No. 1., 71-88.

Umbrello, Steven, 2019. "Atomically Precise Manufacturing and Responsible Innovation: A Value Sensitive Design Approach to Explorative Nanophilosophy." *International Journal of Technoethics*, Vol. 10, No. 2, 1-21. DOI: 10.4018/IJT.2019070101 (**CLASSE A 11/C3**)

Umbrello, Steven; Sorgner, Stefan L., 2019. "Nonconscious Cognitive Suffering: Considering Suffering Risks of Embodied Artificial Intelligence." *Philosophies*, Special Issue: "Frontiers of Embodied Artificial Intelligence: The (r)-evolution of the embodied approach in AI," Vol. 4, No. 2, (24). DOI: 10.3390/philosophies4020024

Umbrello, Steven, 2019. "Lethal Autonomous Weapons: Designing War Machines with Values." *Delphi: Interdisciplinary Review of Emerging Technologies*, Vol. 1, No. 2, 30-34. DOI: 10.21552/delphi/2019/1/7

Umbrello, Steven, 2019. "Beneficial Artificial Intelligence Coordination by means of a Value Sensitive Design Approach." *Big Data and Cognitive Computing*, Special Issue: "Artificial Superintelligence: Coordination & Strategy," Vol. 3, No. 1, (5). DOI: 10.3390/bdcc3010005

Umbrello, Steven; Lombard, Jessica, 2018. "Silence of the Idols: Appropriating the Myth of Sisyphus for Posthumanist Discourses." *Postmodern Openings*, Vol. 9, No. 4, 98-121. DOI: 10.18662/po/47.

Umbrello, Steven, 2018. "Designing a Nano-Safe Future." *Solutions*, Vol. 9, No. 4, 1-3.

Umbrello, Steven, 2018. "Posthumanism: A Fickle Philosophy?" *Con Texte*, Vol. 2, No. 1, 28-32. DOI: 10.28984/ct.v2i1.279

Umbrello, Steven; Baum, Seth D., 2018. "Evaluating Future Nanotechnology: The Net Societal Impacts of Atomically Precise Manufacturing." *Futures*, (June) Vol. 100, 63-73. DOI: 10.1016/j.futures.2018.04.007 (**CLASS A 08**)

Umbrello, Steven, 2018. "The Moral Psychology of Value Sensitive Design: the Methodological Issues of Moral Intuitions for Responsible Innovation." *Journal of Responsible Innovation*, Vol. 5, No. 2, 186-200. DOI: 10.1080/23299460.2018.1457401

Scheyer, Peter; Umbrello, Steven, 2019. "Corrupting Effectiveness: Utilitarianism and Moral Impartiality toward Future Persons in Pragmatic Evaluation of Altruistic Interventions," *Journal of Evolution and Technology*, initial submission under review.

Umbrello, Steven; Padovano, Alessandro, and Longo, Francesco, 2019. "Values, Ethics and Technological Innovation in Industry: Rethinking the Operator 4.0 in the Fourth Industrial Revolution," *working paper*.

Umbrello, Steven; Yampolskiy, Roman, 2019. "Designing AI for Explainability and Verifiability: A Value Sensitive Design Approach to Avoid Artificial Stupidity in Autonomous Vehicles," *working paper*.

Umbrello, Steven; van de Poel, Ibo, 2019. "Mapping Value Sensitive Design onto AI for Social Good Principles," *working paper*.

Book Chapters

Umbrello, Steven, 2020. "AI Winter." In Philip Frana and Michael J. Klein (eds.), *Encyclopedia of Artificial Intelligence: The Past, Present, and Future of AI*, ABC-CLIO, *forthcoming*.

Umbrello, Steven, et al., 2020. "Reimagining the future of engineering (fPET workshop)." In Diane P. Michelfelder and Neelke Doorn (eds.), *Routledge Handbook of Philosophy of Engineering*, Routledge, *forthcoming*.

Umbrello, Steven; De Bellis, Angelo F., 2018. "A Value-Sensitive Design Approach to Intelligent Agents." In Roman Yampolskiy (ed.), *Artificial Intelligence Safety and Security*, CRC Press, 395-410. ISBN 9780815369820

Conference Papers

Gazzaneo, Lucia; Padovano, Alessandro, and Umbrello, Steven, 2019. "Designing the Smart Operator 4.0 for Human Values: A Value Sensitive Design Approach," Proceedings of the International Conference on Industry 4.0 and Smart Manufacturing (ISM 2019), *Procedia Manufacturing*, *Forthcoming*.

Friedman, Batya; van den Hoven, Jeroen; Yoo, Daisy; Umbrello, Steven; Hendry, David, 2020. "Panel: The Future of Value Sensitive Design," Proceedings of the 18th International Conference ETHICOMP 2020, *forthcoming*.

Book Reviews

Umbrello, Steven, 2019. "Nihilism and Technology," *Prometheus: Critical Studies in Innovation*, *forthcoming*.

Umbrello, Steven, 2019. "Values, Imagination, and Praxis: Towards A Value Sensitive Future with Technology," *Science and Engineering Ethics*, *forthcoming*. DOI: 10.1007/s11948-019-00122-2

Umbrello, Steven, 2019. "Fragile Umanità by Leonardo Caffo," *Journal of Posthuman Studies*, Vol. 3, No. 1, 105-112. DOI: 10.5325/jpoststud.3.1.0105

Umbrello, Steven, 2019. "Book review: Being Ecological by Timothy Morton," *Journal of Evolution and Technology*, Vol. 29, No. 1, 19-20.

Umbrello, Steven, 2019. "Moving to a Posthuman Technosphere," *Techné: Research in Philosophy and Technology*, Vol. 23, No. 1, 104-106. DOI: 10.5840/techne20192311 (CLASSE A 08)

Umbrello, Steven, 2019. "Evolution Science and Ethics in the Third Millennium: Challenges and Choices for Humankind," *World Futures*, Vol. 95, No. 4, 191-195. DOI: 10.1080/02604027.2018.149011

Umbrello, Steven, 2018. "Costruire Futuri: Migrazioni, città, immaginazioni," *Journal of Futures Studies*, Vol. 23, No. 2, 101-103. DOI: 10.6531/JFS.201812_23(2).0007

Umbrello, Steven, 2018. "A Theory of Everything?," *Cultural Studies Review*, Vol. 24, No. 2, 184-186. DOI: 10.5130/csr.v24i1.6318

Umbrello, Steven, 2018. "Designing in Ethics" *Prometheus: Critical Studies in Innovation*, Vol. 35, No. 2, 160-161. DOI: 10.1080/08109028.2018.1486470

Umbrello, Steven, 2018. "Phil Torres's Morality, Foresight, and Human Flourishing: An Introduction to Existential Risks," *Futures*, Vol. 98, 90-91. DOI: 10.1016/j.futures.2018.02.007 (CLASS A 08)

Umbrello, Steven, 2018. "Humankind: Solidarity with Nonhuman People," *Journal of Critical Realism*, Vol. 17, No. 1, 84-86. DOI: 10.1080/14767430.2018.1437878

Umbrello, Steven, 2017. "Manuel DeLanda and Graham Harman's *The Rise of Realism*," *The International Journal of Actor-Network Theory and Technological Innovation*, Vol. 9, No. 2, 63-66.

Conferences

Invited Presentations

Friedman, Batya; van den Hoven, Jeroen; Yoo, Daisy, Umbrello, Steven; and Hendry, David, 2020. "Panel: The Future of Value Sensitive Design," *ETHICOMP 2020: Paradigm Shifts in ICT Ethics: Societal Challenges in the Smart Society*, Track: *Meeting Societal Challenges in Intelligent Communities Through Value Sensitive Design*, La Rioja University, Logroño, Spain, 17-19 June 2020.

Gazzaneo, Lucia; Padovano, Alessandro, and Umbrello, Steven, 2019. "Designing the Smart Operator 4.0 for Human Values: A Value Sensitive Design Approach," *International Conference on Industry 4.0 and Smart Manufacturing (ISM 2019)*, University of Calabria, Rende, Italia, 20-22 November 2019.

Umbrello, Steven, 2019. "Nanopharmacy and Care-Centered Value Sensitive Design," *Medicina e Nuove Tecnologie: Dalle Apps Ai Robot, Come Cambia Il Volto Della Cura*, University of Turin, Turin, Italia, 30 April 2019.

Umbrello, Steven, 2016. "Nootropics: The Current Trend of Personal Cognitive Enhancement" *2016 Workshop in Transhumanism*. LUMEN Research Center in Social and Humanistic Sciences, Romania.

Conference Oral Presentations

Umbrello, Steven, 2018. "Intuiting Safe Design: Strengthening Design-for-Values Frameworks" *#PET2018 - Forum on Philosophy, Engineering and Technology*. University of Maryland, USA.

Umbrello, Steven, 2018. "Safe-by-Design: Principled Methods for Embedding Values in Transformative Technologies" *Sixth Annual Conference on Governance of Emerging Technologies: Law, Policy, and Ethics*. Arizona State University, USA.

Umbrello, Steven, 2018. "Theological Determinism to Technological Determinism: The Secularization of Eschatological Narratives" *NESTS - Northeast Science and Technology Studies Conference*. Cornell University, USA.

Umbrello, Steven, 2018. "The Future of Value Sensitive Design" *Reformatting the World: An Interdisciplinary Conference on Technology and Humanities*. York University, Canada.

Umbrello, Steven, 2017. "Duoploding the Apocalypse: A Writing Instrument for Ecological Thought" *Object Lessons | Technoscientific Cultures, 3rd Annual Conference*. York University, Canada.

Workshops

- Exploring Values in Technology Across Methods and Disciplines, *Delft University of Technology*, Delft, Netherlands, 31 October - 1 November 2019.

- Global AI Governance Framework Research Team, *AI Safety Camp*, Ávila, Spain, 26th April – 5th May 2019.
- *Medicina e Nuove Tecnologie: Dalle Apps Ai Robot, Come Cambia Il Volto Della Cura*, *University of Turin*, Turin, Italia, 30 April 2019.
- *Ethics in Emerging Tech*, *Innovation Hub Berlin*, Berlin, Germany, 1st March 2019.
- *Beyond Anthropocentrism*, *2nd Posthuman Studies Workshop*, John Cabot University, Rome, Italia, February 8, 2019.
- *Reimagining the Future of Engineering*, Forum on Philosophy, Engineering and Technology, University of Maryland, USA, May 30, 2018.
- *Knowledge Mobilization: Planning and Practice*, York University, Canada, January 2, 2018.

Scholarships and Awards

- Italian Government Scholarship** - 2018/2019 - €8'100 EUR
- York University Graduate Development Bursary** - 2018 - \$350 CAD
- York University Graduate Fellowship (Masters)** - 2017/2018 - \$11,000 CAD
- York University CUPE 3903 Graduate Union GFA** - 2017/2018 - \$1,260 CAD

Courses

- Certificate in Global Health Case Studies from a Biosocial Perspective** - Feb 2016 - May 2016
Harvard University
 - Investigated what the field of global health comprises, how global health problems are defined and constructed, and how global health interventions play out in both expected and unexpected ways.
- Certificate in Responsible Innovation: Ethics, Safety, and Technology** - Apr 2016 - June 2016
Delft University
 - Engaged with concepts surrounding how to deal with risks and ethical questions raised by the development of new technologies.
- Certificate in Transhumanism** - July 2015 - Oct 2015
Brighter Brains Institute
 - Studied and researched transhumanist philosophy and policy.
- Certificate in Brain Health and Social Policy** - July 2015 - Oct 2015
Brighter Brains Institute
 - Studied and researched influences on brain health and conveyed solutions that promote brain health.
- Stoic Essential Studies Course** - Feb - June 2015
The College of Stoic Philosophers
 - Studied Stoic logic, physics, ethics, and practice.

Professional Memberships

- [Review Board] **Transhumanist Policy Center** - 2015 - Present
- [Senior Member (Professional)] **The Foundation for Responsible Robotics** - 2015 - 2017
- [Member] **Philosophy of Science Association** - 2014 - 2016
- [Member] **Joint Caucus of Socially Engaged Philosophers & Historians of Science** 2014 - 2016
- [Member] **History of Science Society** - 2015 - 2016
- [Member] **The Aristotelian Society** - 2014 - 2016
- [Intern] **The Richard Dawkins Foundation for Reason and Science** - 2014 - 2015
- [Volunteer] **Canadian Bookbinder's & Book Artists Guild** - 2014

Volunteer Positions

- Advisory Board, Institute for Ethics and Emerging Technologies - 2015 - Present
- Associate Board Member, Transhumanist Policy Center - 2015 - Present
- Affiliated Scholar, Transhumanity.Net - 2015 - Present
- Intern, The Richard Dawkins Foundation for Reason & Science - 2014 - 2015

- Intern, The Canadian Bookbinder's and Book Artists Guild - 2014 - 2015
- Note Taker, The University of Toronto Accessibility Resource Centre - 2012 - 2014
- ALS Society of Canada - 2007 - 2011

Honours and awards

- **Top Peer Reviewer (Top 1% Social Sciences)** - Publons 2019
- **Excellent Reviewing Award (8th worldwide)** - Publons 2018 Peer Review Award - Sept 2018
- **Outstanding Contribution in Reviewing** - Futures (Elsevier) - Sept 2017
- **Honours Distinction** - University of Toronto - 2016
- **Certificate of Appreciation from Accessibility Resources** - University of Toronto - 2012 - 2014
- **Ontario Scholar Award** - Holy Cross Catholic Academy - 2011
- **Certificate of Merit** - Holy Cross Catholic Academy - 2011
- **Honour Roll** - Holy Cross Catholic Academy - 2010 - 2011