**Shannon Vallor** Department of Philosophy

**Curriculum Vitae** Santa Clara University

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# Areas of Specialization

Emerging Technology Ethics, Applied Virtue Ethics, Philosophy of Science and Technology

# Areas of Competence

Phenomenology, Epistemology, Philosophy of Mind

# Academic Appointments

**William J. Rewak, S.J. Professor***,* Department of Philosophy, Santa Clara University 2016-present

**Associate Professor,** Department of Philosophy, Santa Clara University 2012-2016

**Assistant Professor,** Department of Philosophy, Santa Clara University 2006-2012

# Professional Service/Affiliations

*President*, Society for Philosophy and Technology 2015-2017 (www.spt.org)

*Executive Board Member*, Foundation for Responsible Robotics (www.responsiblerobotics.org)

*Executive Editorial Board Member*, Philosophical Studies Book Series, Springer

*Editorial Board Member*, Philosophy, Technology and Society Book Series, Rowman and Littlefield

*Program Committee Member*, American Philosophical Association, Pacific Division, 2014-2017

*Member,* Global Initiative for Ethical Considerations in the Design of Autonomous Systems, IEEE

Standards Association (https://standards.ieee.org/develop/indconn/ec/autonomous\_systems.html)

*Member,* International Center for Information Ethics (http://icie.zkm.de/)

*Member*, ETNSI Research Initiative (Emerging Technologies of National Security and Intelligence) at

John J. Reilly Center for Science, Technology and Values, University of Notre Dame

(http://reilly.nd.edu/research/initiatives/etnsi/)

# Education

Ph.D., Philosophy, Boston College 2001

# Awards and Grants

World Technology Award in Ethics, World Technology Network 2015

Louis and Dorina Brutocao Award for Teaching Excellence, Santa Clara University 2015

National Science Foundation EESE Grant, co-PI 2012-2014

“Geospatial Privacy: Legal, Social and Ethical Implications for Users of Geocoded Data”

Graves Award for Excellence in Teaching in the Humanities 2010

Donald J. White Teaching Excellence Award, Boston College 1998

# Monographs and Edited Volumes

**🞟** *The Oxford Handbook of Philosophy of Technology* (forthcoming from Oxford University Press, 2019)

**🞟** *Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting*. New York: Oxford University Press, 2016, 309 pp.

**Peer-Reviewed Articles and Book Chapters**

*In Press*

1. “AI and the Ethics of Self-Learning Robots.” (co-authored with George Bekey) Forthcoming in *Robot Ethics 2.0*, Patrick Lin, Keith Abney and Ryan Jenkins, eds. (New York: Oxford University Press, 2017)
2. “AI and the Automation of Wisdom.” Forthcoming in *Philosophy and Computing: Essays in Epistemology, Philosophy of Mind, Logic, and Ethics* (Cham: Springer, 2017)
3. “Robots with Guns.” Forthcoming in *Spaces for the Future: A Companion to the Philosophy of Technology* Joseph C. Pitt and Ashley Shew, eds. (New York: Routledge, 2017)

*Published*

1. “Digital Imaging and the Future of Evidence.” In *Technoscience and Postphenomenology: The Manhattan Papers.* Jan Kyrre Berg Friis and Robert Crease, eds. (Lanham, MD: Lexington Press, 2015), 19-38.
2. “Moral Deskilling and Upskilling in a New Machine Age: Reflections on the Ambiguous Future of Character,” *Philosophy and Technology* 28 (2015), 107-124.
3. “Armed Robots and Military Virtue.” In *The Ethics of Information Warfare*, Luciano Floridi and Mariarosaria Taddeo, eds. (Switzerland: Springer, 2014), 169-185.
4. “Experimental Virtues: Perceptual Responsiveness and the Praxis of Scientific Observation.” In *Virtue Epistemology Naturalized: Bridges between Virtue Epistemology and Philosophy of Science*, Abrol Fairweather, ed.(Cham: Synthese Library Series, Springer, 2014), 269-290.
5. “Social Media.” In *Ethics, Science, Technology and Engineering: A Global Resource*, *2nd. Ed.,* J. Britt Holbrook, ed. (Farmington Hills, MI: Macmillan Reference, 2015), 203-206*.*
6. “Super Soldiers: The Ethical, Legal and Operational Implications (Part 2).” Co-authored with Patrick Lin, Max Mehlman, Keith Abney, Shannon French, Jai Galliott, Michael Burnam-Fink, Alexander R. LaCroix, and Seth Schuknecht. In *Global Issues and Ethical Considerations in Human Enhancement Technologies,* Steven John Thompson, ed. (Hershey, PA: IGI Global), 139-160*.*
7. “Hitting the Moving Target: The Challenges of Creating a Dynamic Curriculum to Address the Ethical Dimensions of Geospatial Data.” (co-authored with John Newman Carr, Scott Freundschuh, William Gannon and Paul Zandbergen). *Journal of Geography in Higher Education* 38(4) (2014), 444-454.
8. “The Future of Military Virtue: Autonomous Systems and Moral Deskilling in the Military Profession.” In *2013 5th International Conference on Cyber Conflict (CyCon 2013): Proceedings*, Karlis Podens, Jan Stinissen and Markus Maybaum, eds. (Tallinn, Estonia: NATO CCDCOE, 2013), 471-486.
9. “Flourishing on Facebook: Virtue Friendship and New Social Media.” *Ethics and Information Technology*, 14(3) (2012), 185-199.
10. “Social Networking and Ethics.”In *Stanford Encyclopedia of Philosophy*, E. Zalta, ed. Fall 2012 edition. <http://plato.stanford.edu/archives/fall2012/entries/ethics-social-networking/>
11. “New Social Media and the Virtues.”In*The Good Life in a Technological Age*, Philip Brey, Adam Briggle and Edward Spence, eds. (London: Routledge, 2012), 193-202.
12. “Carebots and Caregivers: Sustaining the Ethical Ideal of Care in the 21st Century.” *Philosophy & Technology* 24:3 (2011), 251-268. Reprinted in *Machine Ethics and Robot Ethics*, Wendell Wallach and Peter Asaro, eds. (New York: Ashgate, 2016)
13. “Knowing What to Wish For:  Human Enhancement Technology, Dignity and Virtue.” *Techné: Research in Philosophy and Technology* 15:2 (2011), 82-100.
14. “Social Networking Technology and the Virtues.”*Ethics and Information Technology,* 12:2 (2010), 157-70. Reprinted in *The Ethics of Information Technologies,* Mariarosaria Taddeo and Keith Miller, eds. (New York: Ashgate, 2016)
15. “The Pregnancy of the Real: A Phenomenological Defense of Experimental Realism.”*Inquiry*, 52:1 (2009), 1-25.
16. “The Fantasy of Third-Person Science: Phenomenology, Ontology and Evidence.”*Phenomenology and the Cognitive Sciences,* 8:1 (2009), 1-15.
17. “An Enactive-Phenomenological Approach to Veridical Perception.”*Journal of Consciousness Studies*, 13:4 (2006), 39-60.
18. “The Intentionality of Reference in Husserl and the Analytic Tradition.”In*Intentionality: Past and Future*, eds. G. Forrai and G. Kampis. (Amsterdam: Rodopi, 2005), 111-125.
19. “Frege’s Puzzle: A Phenomenological Solution?” *Philosophy Today* (SPEP Supplement 2002), 178-185.
20. “How We Think About Things: Husserl, Putnam and the Metaphysics of Reference.”*Discourse*, vol. 5 (Spring 1999), 1-11.

**Editorials/ Essays**

1. “Lessons from Isaac Asimov’s Multivac.” *The Atlantic* (May 2, 2017) <https://www.theatlantic.com/technology/archive/2017/05/lessons-from-the-multivac/523773/>
2. “On Artificial Intelligence and the Public Good.” Markkula Center for Applied Ethics blog, *Internet Ethics: Views from Silicon Valley*. July 19, 2016. <https://www.scu.edu/ethics/internet-ethics-blog/on-artificial-intelligence-and-the-public-good/> Also published by the White House Office of Science and Technology Policy, September 1, 2016 (Respondent 50, page 47: direct link is <https://www.whitehouse.gov/sites/default/files/microsites/ostp/OSTP-AI-RFI-Responses.pdf> )
3. “Technoscience and the Resilience of Phenomenology: A Review of Don Ihde’s *Husserl’s Missing Technologies.”* *Techné: Research in Philosophy and Technology* 20:2 (2016), pp. 90-94.
4. “A Fragile Pedestal – How Strong is Our Commitment to Democracy? A Response to Martha Nussbaum.” *Explore* (Spring 2015), 72-75.
5. “Big Data, Democracy and The Path Not Taken.”*Huffington Post*, June 20, 2014. <http://www.huffingtonpost.com/shannon-vallor/big-data-democracy-and-th\_b\_5516259.html>
6. “Why Software Engineering Courses Should Include Ethics Coverage,” (co-authored with Arvind Narayanan), *Communications of the ACM*, 53:4 (2014), 23-25.
7. “Examined Lives.” (Formerly “Self-Surveillance Technologies vs. Reflective Practice.”) *The Philosophers’ Magazine*, 63:4, (2013), 91-98.

# Selected Presentations

1. “Algorithmic Opacity and the Shrinking Space of Moral Reasons in Computing Practices,” Annual Meeting of the International Association for Computing and Philosophy, Stanford University, June 28, 2017 (Forthcoming).
2. “Technomoral Virtues and the Future of Human Flourishing,” ADAPT Centre, Dublin, Ireland, June 19, 2017. (Forthcoming)
3. SPT Presidential Address, 20th International Conference of the Society for Philosophy and Technology, Technical University of Darmstadt, Germany, June 17, 2017. (Forthcoming)
4. “Artificial Intelligence and Public Trust,” Ethics of Technology: The Future Agenda (4TU Ethics), University of Twente, Netherlands. June 12, 2017. (Forthcoming)
5. “AI’s Ethical Imperative: How to Humanize Machine Values,” Keynote address, Stanford Computer Forum, Stanford University, April 11, 2017.
6. “Ethics, Innovation and the Good Life,” Faith and Innovation Conference, St. Andrews Episcopal Church, Saratoga, CA. February 25, 2017.
7. “The Robotic Mirror: Finding Humanity in Machine Values,” Sonoma State University. February 14, 2017.
8. “Control and Responsible Innovation in the Development of Autonomous Machines,” Hastings Center, Garrison, NY. October 31, 2016.
9. “AI and the Future of Human Flourishing,” IBM World of Watson, Mandalay Bay Hotel, Las Vegas. October 26, 2016.
10. “Responsible Robotics and Moral Philosophy,” Robo-Philosophy 2016, University of Aarhus, Denmark. October 21, 2016.
11. “Artificial *Phronesis:* A Critical Inquiry,” Robo-Philosophy 2016, University of Aarhus, Denmark. October 20, 2016.
12. “Our Autonomous Future,” The Seminar, Scottsdale AZ, June 8, 2016.
13. “The Ethical Challenges of Invisible Software,” IEEE Ethics 2016, Vancouver B.C., May 14, 2016.
14. “Technomorality and the Future: A Survival Guide for Advanced Species.” Linus Pauling Memorial Lecture, Institute for Science, Engineering and Public Policy, Portland, OR, January 14, 2016.
15. “The Case for the Technomoral Virtues: Technology and Human Flourishing,” University of Oregon, Eugene, OR, January 20, 2016.
16. “21st Century Virtue: Ethics, Technology and the Future,” World Technology Summit, New York, NY, November 19, 2015.
17. “Artificial Intelligence Ethics.” Panelist at Silicon Valley Reinvents the Wheel, The Computer History Museum, Mountain View, CA, October 5, 2015.
18. “Cultivating the Technomoral Self: Challenges and Opportunities for 21st Century Virtue.” 19th International Conference of the Society for Philosophy and Technology, Shenyang, China, July 2015. Keynote address.
19. “A.I. and the Automation of Moral Wisdom.” Joint conference of International Association of Computing and Philosophy and Computer Ethics: Philosophical Enquiry/International Society for Ethics and Information Technology, University of Delaware, June 2015. Keynote address.
20. “The Ethics of App Development.” MAGIC Digital Media Research Center, Rochester Institute of Technology, Rochester, NY, March 18, 2015.
21. “Ethics for Software/App Design." College of Engineering, Cal Poly at San Luis Obispo, CA, March 5, 2015.
22. “The Automation of Scientific Inquiry: AI, Scientific Virtue and The Value Problem." 24th Biennial Meeting of the Philosophy of Science Association, Chicago IL, November 9, 2014
23. “What is a Good App?” Silicon Valley iOS Developers Meetup, Skype HQ, Palo Alto, CA, July 21, 2014.
24. “Commentary on Don Ihde’s ‘Husserl’s Missing Technologies.’” 45th Annual Husserl Circle Meeting, Dartmouth College, May 29 2014.
25. “Ethics and [Micro]Locational Privacy in Mobile App Development.” iBeacon Makers’ Workshop, April 29 2014, Andreessen Horowitz, Menlo Park.
26. “The Institution of Practical Wisdom: Cultivating Organizational ELSI Expertise.” NSF-funded conference: *Ahead Of The Curve: Anticipating Ethical, Legal, and Societal Issues Posed by Emerging Weapons Technologies*, April 23 2014, University of Notre Dame. Plenary address.
27. “Perceptual Responsiveness as a Virtue: Notes for a Phenomenological Ethic.” American Philosophical Association, Pacific Division, April 16 2014, San Diego CA.
28. “Paying Moral Attention: Ethics in an Age of Techno-Distraction.” University Honors Program Presents, SCU, April 2, 2014.
29. “Ethics for App Developers.” Renaissance iOS App Developers Conference, January 2014, San Francisco CA.
30. “The Virtue of Moral Attention: Ethical and Cognitive Implications of Media Multitasking.” University of California at Merced, December 2013.
31. “Digital Imaging And New Evidential Practices In The Age Of Information: A (Post)-Phenomenological Analysis.” International Conference of the Society for Philosophy and Technology, Lisbon, July 2013.
32. “Moral Deskilling and Upskilling in a New Machine Age:Reflections on The Ambiguous Future of Character.” CEPE 2013, Universidade Autónoma de Lisboa, Lisbon, July 2013.
33. “The Future of Military Virtue: Autonomous Systems and Moral Deskilling in the Military Profession.” 5th International Conference on Cyber Conflict (CyCon 2013*)*, NATO Cooperative Cyber Defence Centre of Excellence, Tallinn, Estonia, June 2013. Plenary talk.
34. “Drones, Robots and the Moral Deskilling of War: Is ‘Military Virtue’ Obsolete?” Macalester College, St. Paul, MN, December 2012.
35. “Information Technologies, Digital Imaging, and the Ethics of Evidence” AISB/IACAP 2012 World Congress Symposium on Information Ethics, University of Birmingham, UK, July 2012.
36. “The Hermeneutic Task of Conceptualizing Techno-Moral Change” EPET Conference, Maastricht University, Netherlands, July 2012.
37. “New Technologies as Pedagogical Bridges: Teaching Classic Texts in the Humanities.” SUNY Stony Brook, April 2012.
38. “Beyond Originary Givenness? Post-Phenomenology and the Future of Evidence.” *Postphenomenology and the Future of the Philosophy of Technology: A Conference in Honor of Don Ihde*, SUNY Stony Brook, March 2012.
39. “How to Bring Battlefield Ethics into the Lab (and Back).” Workshop on *The Ethics of Informational Warfare*, organized by the UNESCO Chair in Information and Computer Ethics in collaboration with the Marie Curie Intra European Fellowship Program, University of Hertfordshire, UK, July 2011.
40. “Carebots and Caregivers: Robotics and the Ethical Ideal of Care.” 2011 Conference of the International Association for Computing and Philosophy, Aarhus University, Denmark, July 2011.
41. “New Digital Media and the Cultivation of Character.” City University of Hong Kong, November 2010.
42. “Enhancement Technologies and Human Dignity: On the Virtues of Transformation.” International Conference of the Society for Philosophy and Technology: *Converging Technologies, Changing Societies*, University of Twente, Netherlands, July 2009.
43. “Social Networking and the Virtues.” American Philosophical Association, Pacific Division Group Meeting of *Society for Philosophy and Technology*, Vancouver, B.C., April 2009.
44. “Technology, Communication and the Virtues.” GLITA workshop on *The Good Life in a Technological Age*, University of Twente, Netherlands, June 2008.
45. “Social Networking and the Virtues.” Panel event *The Ethics of Social Networking*,Stanford University (Stanford Center on Ethics & Stanford Center for Internet and Society), February 2008.
46. “The Pregnancy of the Real: A Phenomenological Analysis of Experimental Realism.” 46th Annual Meeting of the Society for Phenomenology and Existential Philosophy, DePaul University, Chicago, November 2007.

# University Service

**🞟** Department Chair, SCU Department of Philosophy, 2014-2017

**🞟** SCU College of Arts and Sciences Rank and Tenure Committee, 2015-2016

**🞟** Member, Internet Ethics Advisory Group, Markkula Center for Applied Ethics @SCU