

Colin K Garvey

Curriculum Vitae

January 2019

Rensselaer Polytechnic Institute
Sage Labs 5710
110 8th Street
Troy, NY 12180 USA
garvec@rpi.edu

1107 Hutton Street
Floor 1
Troy, NY 12180 USA
(812) 369-7437
colinkgarvey.com

EDUCATION

- 2019 PhD, Science & Technology Studies Department, Rensselaer Polytechnic Institute
“Democratic Governance for AI Risk Mitigation.” Advisor: Edward Woodhouse
- 2015 MS, Science & Technology Studies Department, Rensselaer Polytechnic Institute
- 2008 BA, Japanese Literature & Language; Media Studies; Vassar College

PUBLICATIONS

Refereed Journal Articles

- Accepted with revisions. Garvey, Colin. “An AI Arms Race in the Cold War? – The Japanese Fifth Generation Computer Systems Project.” *Pacific Historical Review*.
- 2018 Garvey, Colin. “Interview with Colin Garvey, Rensselaer Polytechnic Institute. Artificial Intelligence and Systems Medicine Convergence.” *OMICS: A Journal of Integrative Biology* 22(2): 130-132.
- 2014 Linnda R. Caporael and Colin Garvey. “The Primacy of Scaffolding within Groups for the Evolution of Group-Level Traits.” *Behavioral and Brain Sciences* 37(3): 255–56.

Conference Proceedings

- Forthcoming. Garvey, Colin. “AI Risk Mitigation Through Democratic Governance: Introducing the 7-Dimensional AI Risk Horizon.” *Proceedings of the First AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society*.
- 2018 Garvey, Colin. “A Framework for Evaluating Barriers to the Democratization of Artificial Intelligence.” In *Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence, New Orleans, LA, USA – February 2–7, 2018*, 8079–80. Palo Alto, CA: AAAI Press.

Book Chapters

- 2017 Colin Garvey and Daniel Chard. "Disrupting the AAA\$." Chapter 2, *Science for the People: Documents from America's Movement of Radical Scientists*. Schmalzer, Chard, and Bothelo, eds. Cambridge, MA: University of Massachusetts Press.
- 2015 Ron Eglash and Colin Garvey. "Satoyama as Generative Justice: Humanity, Hybridity, and Biodiversity in a Horizontal Social Ecology." In *Shape Shifting*. Marhöfer and Lylov, eds., pp. 58-68. Berlin: Archive Books.
- 2014 Ron Eglash and Colin Garvey. "Basins of Attraction for Generative Justice." In *Chaos Theory in Politics*. Banerjee, Erçetin, and Tekin, eds., pp. 75-88. Understanding Complex Systems. Dordrecht: Springer Netherlands.

Book Reviews

- 2017 "Review of *Robots*, by John M. Jordan, Cambridge, MA: The MIT Press, 2016." *ICON* 23 (2017): 200-202
- 2016 "Review of *Superintelligence: Paths, Dangers, Strategies* by Nick Bostrom, Oxford: Oxford University Press, 2014." *ICON* 22: 144-46.

Manuscripts in Preparation

- Colin Garvey and Chandler Maskal. "Ready for AI? Terminating the 'Terminator Syndrome': Sentiment of AI News Coverage and Public Perceptions of AI."
- Garvey, Colin. "For Consumers or Citizens? On the Democratization of AI"
- Garvey, Colin. "The Danger of Safety: Driverless Cars and the Burden of Proof"

Web-based Publications

- 2018 "Broken Promises & Empty Threats: The Evolution of AI in the USA, 1956-1996." *Technology's Stories*. <http://www.technologystories.org/ai-evolution/>
- 2018 "From 'AI for Social Good' to 'AI for Democracy'." The Transhuman Party. <https://www.transhuman-party.org/ai-social-good/>
- 2017 "Making Sense of Autonomous Technologies, 40 Years Later." *Transmissions: An SSS Companion Blog*. <http://wp.me/p92jWy-1x>
- 2017 "On the Democratization of Artificial Intelligence." DATAPOWER 2017, Carleton University, <https://youtu.be/LF7KeYowwq8?t=16m>

AWARDS

- 2017 Best Graduate and Early Career Panel at the Annual Meeting of the Society for the History of Technology

GRANTS AND FELLOWSHIPS

- 2017 Humanities, Arts, and Social Sciences Fellowship, Rensselaer Polytechnic Institute (tuition waiver plus stipend, renewed 2018)
- 2017 Alger Engineering Ethics Fellowship, Rensselaer Polytechnic Institute
- 2012 National Science Foundation GK-12 “Triple Helix” Fellowship, Rensselaer Polytechnic Institute (tuition waiver plus stipend, 2 year term)

INVITED TALKS

- 2015 “The Risks of Artificial Intelligence and their Governance.” New Mexico Institute of Mining and Technology, November 9

CONFERENCE ACTIVITY

Conferences/Symposia Organized

- 2018 Graduate Student Workshop, Annual Meeting of the Society for the History of Technology, St. Louis, MO, October 11-14
- 2017 (Co-organizer) Graduate Student Workshop, Annual Meeting of the Society for the History of Technology, Philadelphia, PA, October 26-29
- 2017 (Organizing Committee Member) Graduate Research Symposium, Rensselaer Polytechnic Institute, March 11-12
- 2016 Graduate Research Symposium, Rensselaer Polytechnic Institute, May 14-15
- 2016 Northeast STS Graduate Student Conference (NESTS), Rensselaer Polytechnic Institute, March 12-13
- 2014 (Organizing Committee Member) Generative Justice: Value from the Bottom-Up, Rensselaer Polytechnic Institute, June 27-28
- 2013 Sustainability Workshop & Graduate Student Conference, Rensselaer Polytechnic Institute

Panels Organized

- 2018 Presidential Roundtable, “An Offering of Tools and Advice for a Post-Grad Work/Life; Or, ‘Get a Job!’” Society for the History of Technology, St. Louis, MO, October 11-14
- 2017 “The History of Artificial Intelligence and its Discontents.” Two stringed sessions. Society for the History of Technology, Philadelphia, PA, October 26-29
- 2017 “Making Sense of *Autonomous Technologies*, 40 Years Later.” Three stringed session. Society for the Social Study of Science, Boston, MA, August 30 – Sept. 2

Papers Presented

- 2018 “The ‘General Problem Solver’ Doesn’t Exist: Mortimer Taube & The Art of AI Criticism.” Society for the History of Technology, St. Louis, MO, October 11-14
- 2018 “A Framework for Evaluating Barriers to the Democratization of Artificial Intelligence.” Thirty-Second AAAI Conference on Artificial Intelligence. New Orleans, LA, February 2-7
- 2018 “AI Risk Mitigation through Democratic Governance.” AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society, New Orleans, LA, February 2-3
- 2017 “The Evolution of AI Risk in America, 1956-1996.” Society for the History of Technology, Philadelphia, PA, October 26-29
- 2017 “Evaluating Barriers to the Democratization of AI R&D.” Society for New and Emerging Technologies, Arizona State University, October 9-11
- 2017 “Risks, Promises, and the Democratization of AI.” MidweSTS Graduate Student Conference, Indiana University, September 29-30
- 2017 “Evaluating Barriers to the Democratization of AI R&D.” Society for the Social Study of Science, Boston, MA, August 30 – Sept. 2
- 2017 “On the Democratization of Artificial Intelligence.” Data Power, Carleton University, Ontario, Canada, June 22-23
- 2017 “A Framework for Evaluating Barriers to the Democratization of AI.” Engineering and Liberal Education Symposium, Union College, June 7
- 2016 “Evaluating Barriers to the Democratization of AI R&D through Intelligent Trial & Error (ITE)” De Lange Conference X, “Humans, Machines, and the Future of Work,” Rice University, December 5-6
- 2016 (Co-presenter) “Where Do They See STS Headed?” 40th Anniversary of the Inaugural Meeting of the Society for the Social Studies of Science, Cornell University, October 27-28
- 2016 “Risk and Governance of Artificial Intelligence in the USA and Japan.” Society for the History of Technology, National University of Singapore, June 22-26
- 2016 “Appropriate Intelligence? AI and the Governance of Emerging Technologies.” STGlobal Graduate Student Conference, National Academy of Sciences, Washington DC, April 8-9
- 2016 “The ‘Failure’ of the Japanese Fifth Generation Computer Systems (FGCS) Project.” Northeast STS Graduate Student Conference, Rensselaer Polytechnic Institute, March 12-13
- 2015 “Faster vs Smarter: Governance and AI.” Society for the Social Studies of Science, Denver, CO, November 11-15
- 2015 “Economic Threats, National Defense, and the ‘Manifest Destiny’ of AI: The Failure of the Japanese Fifth Generation Computer Systems Project, 1982-1994.” Society for the History of Technology, Albuquerque, NM, October 8-11

- 2015 “Zen and the Science of Cultural Evolution.” International Society for the History, Philosophy, and Social Sciences of Biology, Montreal, Canada, July 5-10
- 2014 “Darwin was an Abolitionist: The Anti-Racist Origins of Evolutionary Theory, 1770-1871.” Generative Justice: Value from the Bottom-Up, Rensselaer Polytechnic Institute, June 27-28
- 2013 “The Meme is Dead! Long Live the Meme! The Importance of Replication in Theories of Cultural Evolution.” International Society for the History, Philosophy, and Social Sciences of Biology, Montpellier, France, July 7-12

Discussant

- 2018 Presidential Roundtable, “The Future of SHOT: Gateways to the Next 60 Years.” Society for the History of Technology, St. Louis, MO, October 11-14

CAMPUS TALKS

- 2017 “How to Cope with the Seven Deadly Risks of Artificial Intelligence.” STS Departmental Colloquium Series, Rensselaer Polytechnic Institute, November 1
- 2016 “Risky Machines: AI and LAWs.” STS Colloquium Series on “Artificial Intelligence, Robots, and the Future of Work,” Rensselaer Polytechnic Institute, September 14

TEACHING EXPERIENCE

Rensselaer Polytechnic Institute

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|------|--------|---|
| 2017 | Spring | Information Technology and Society – Teaching Assistant |
| 2016 | Fall | Cultures of Scientific Revolution – Teaching Assistant |
| 2016 | Spring | Science, Technology, and Society – Co-Instructor |
| 2015 | Fall | Science, Technology, and Society – Co-Instructor |
| 2015 | Spring | Information Technology and Society – Teaching Assistant |

SERVICE TO PROFESSION

- 2017 - 2018 Member, Executive Council, Society for the History of Technology. Appointed as first ever graduate student member of SHOT EC. Passed constitutional amendment securing the position for future grads.
- 2016 - 2018 Chair, Co-Chair, Early Career Interest Group (ECIG) of the Society for the History of Technology

- 2016 - 2017 Graduate Student Representative, Executive Council, Society for the History of Technology
- 2016 Co-Founder, Early Career Interest Group of the Society for the History of Technology
- 2013 - 2017 Member, Publication Committee, International Society for the History, Philosophy, and Social Sciences of Biology

DEPARTMENTAL SERVICE

- 2016 - 2017 Graduate Student Representative, Science & Technology Studies Department, Rensselaer Polytechnic Institute

EXTRA TRAINING

- 2017 Anthropocene Campus Philadelphia, Drexel University, October 22-27
- 2013 First International Summer School on Evolution: Preparing a Future Generation for Interdisciplinary Evolution Research. Ciência Viva Knowledge Pavilion, Lisbon, Portugal, July 15-19

PROFESSIONAL SKILLS

Translator

Japanese to English translation of over 60 scientific abstracts and articles.

Areas of expertise: AI, biology, ecology, history, neuroscience, social sciences, robotics

Zen Buddhist Monk

2018 Completed Summer *Ango* (Intensive Training) at Daieiji Temple, Somi, Niigata

2012 Ordained in the Japanese Soto Zen tradition at Saimyoji Temple, Sanjo, Niigata

COURSES PREPARED TO TEACH

Introductory Level

Artificial Intelligence, Ethics, and Society

Introduction to Science, Technology, and Society

Mechas, Manga, and Anime: Information Technology and Japanese Society

Mid-Level

Mind, Machine, Megamachine: A Global History of Computing

Ethics, Politics, and Economics of Artificial Intelligence

A Survey of Japanese Literature from the Heian Era to Haruki Murakami

Upper-Level Undergraduate / Graduate Seminars

Risks, Disasters, Catastrophes: Governing Technology for the 23rd Century

Self and Society, Mind and Machine: Artificial Intelligence in East/West Context

LANGUAGE PROFICIENCY

Japanese

Fluent speaker, excellent reader, skilled writer

2012 “Fluency,” Japanese Language Proficiency Test, Level 1 (JLPT N1)

2011 “Business Proficiency,” Japanese Language Proficiency Test, Level 2 (JLPT N2)

PROFESSIONAL MEMBERSHIPS

Member, Society for the History of Technology (SHOT)

Member, SHOT Special Interest Group on Computing, Information, & Society (SIGCIS)

Member, Society for the Social Studies of Science (4S)

Member, History of Science Society (HSS)

Member, American Association for Advancement of Science (AAAS)

Member, Association for the Advancement of Artificial Intelligence (AAAI)

Member, IEEE; Society on Social Implications of Technology (SSIT)

Member, Association for Computing Machinery (ACM)

Member, ACM Special Interest Group on Artificial Intelligence (SIGAI)

2013 – 2017 Member, International Society for the History, Philosophy, and Social Sciences of Biology (ISHPSSB)

REFERENCES

Langdon Winner

Professor, Thomas Phelan Chair of Humanities & Social Sciences

Department of Science & Technology Studies, Rensselaer Polytechnic Institute

110 Eighth Street, Troy, NY 12180

winner@rpi.edu

+1 (518) 276-8498

John Krige

Past President, Society for the History of Technology (2016 - 2018)

Kranzberg Professor, School of History and Sociology, Georgia Institute of Technology

221 Bobby Dodd Way, Atlanta GA 30332, USA

john.krige@hsoc.gatech.edu

+1 (404) 894-7765

Atsushi Akera

Associate Professor, Graduate Program Director

Department of Science & Technology Studies, Rensselaer Polytechnic Institute

110 Eighth Street, Troy, NY 12180

akeraa@rpi.edu

+1 (518) 300-0613

Teaching Reference

Steve Breyman

Associate Professor

Department of Science & Technology Studies, Rensselaer Polytechnic Institute

110 Eighth Street, Troy, NY 12180

breyms@rpi.edu

+1 (518) 276-8515