

[next] CITATIONS December 3–4, 2019 • San Francisco

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Citations (books, films, and TV series, listed by speaker)

Saul Griffith Carson, Rachel	Silent Spring	1962
Laurie Yoler Skloot, Rebecca	The Immortal Life of Henrietta Lacks	2010
Gary Marcus		
Marcus, Gary	Rebooting AI: Building Artificial Intelligence We Can Trust	2019
Marcus, Gary, and Jeremy Freeman, editors	The Future of the Brain: Essays by the World's Leading Neuroscientists	2014
Marcus, Gary	Guitar Zero: The New Musician and the Science of Learning	2012
Marcus, Gary	Kluge: The Haphazard Construction of the Human Mind	2008
Marcus, Gary	The Norton Psychology Reader	2006
Marcus, Gary	The Birth of the Mind: How a Tiny Number of Genes Creates the Complexities of Human Thought	2004
Marcus, Gary	The Algebraic Mind: Integrating Connectionism and Cognitive Science	2001
Kahneman, Daniel	Thinking, Fast and Slow	2011
Minsky, Marvin	The Society of Mind	1986
Pinker, Steven	Words and Rules	2000
Pinker, Steven	The Language Instinct	1994
Boole, George	An Investigation of the Laws of Thought on which are Founded the Mathematical Theories of Logic and Probabilities	1854
Domingos, Pedro	The Master Algorithm	2015
Carey, Susan	The Origin of Concepts	2010
Marko Papic		
Allison, Graham	Destined for War: Can America and China Escape Thucydides's Trap?	2017
Thucydides, M.I. Finley, et al.	History of the Peloponnesian War	1954
Mitchell, B.R.	International Historical Statistics: Europe 1750–1988	1992
Mitchell, B.R.	International Historical Statistics: Americas 1750–1988	1993
Lee, Kai-Fu	Al Superpowers: China, Silicon Valley, and the New World Order	2018
Mazzucato, Mariana	The Entrepreneurial State: Debunking Public vs. Private Sector Myths	2015

Fabey, Michael	Crashback: The Power Clash between the	2017
	U.S. and China in the Pacific	
Aliber, R.Z., and C.P.	Manias, Panics, and Crashes: A History of	2015
Kindleberger	Financial Crises, 7 th Edition	
Kindleberger, Charles	The World in Depression 1929–1939	1973

Online Resources (by speaker, in order of appearance)

Jack Dongarra

- https://www.top500.org/ The TOP500 list has been ordering the world's supercomputers by performance on the LINPACK benchmark since 1986.
- https://www.energy.gov/articles/secretary-energy-rick-perry-announces-18-billion-initiative-new-supercomputers Announcement by the U.S. Department of Energy made on April 9, 2018, entitled "Secretary of Energy Rick Perry announces \$1.8 billion initiative for new supercomputers."
- https://exascaleproject.org/ Website for the Exascale Computing Project, which advocates for the importance of the United States leading the charge toward exascale computing.
- https://www.nytimes.com/2019/06/21/us/politics/us-china-trade-blacklist.html Article by Ana Swanson, Paul Mozur, and Steve Lohr, first appearing in the New York Times on June 21, 2019, entitled "U.S. blacklists more Chinese companies over national security concerns."
- https://www.economist.com/business/2019/06/29/an-american-ban-hits-chinas-supercomputer-industry
 — Article first appearing in the *Economist* on June 29, 2019, entitled "American ban hits China's supercomputer industry."
- https://www.bloomberg.com/news/articles/2019-06-25/trump-s-latest-china-salvo-betrays-alarm-over-supercomputer-race Article first appearing on Bloomberg on June 24, 2019, entitled "Trump's latest China salvo betrays alarm over supercomputer race."
- https://www.foxbusiness.com/politics/us-blacklists-chinese-supercomputing-companies-national-security-threats Article by Shelley Ng first appearing on Fox News on June 21, 2019, entitled US blacklists 5 Chinese supercomputing companies, labels them national security threats."
- https://orau.gov/ai_townhall/ Learn more about U.S. Department of Energy's AI for Science Town Hall event, which was held October 22–23, 2019.
- https://www.energy.gov/science-innovation/artificial-intelligence-and-technology-office Learn more about the U.S. Department of Energy's Artificial Intelligence and Technology Office.
- https://science.sciencemag.org/content/366/6465/559 Abstract and access options for Service, R.F. 2019. DOE readies multibillion-dollar Al push. Science 366:559–560.

Kelly Wanser

- https://www.silverlining.ngo/ Website for SilverLining, a nonprofit organization driving research to
 ensure safe pathways for climate within a decade.
- https://www.silverlining.ngo/safe-climate-report SilverLining's 2019 report for U.S. policymakers, entitled "Ensuring a safe climate: A national imperative for research in climate intervention and Earth system prediction."
- https://arstechnica.com/science/2017/11/us-house-science-committee-just-had-a-rational-hearing-about-climate/ Article by Scott Johnson first appearing on Ars Technica on November 9, 2017, entitled "US House science committee just had a rational hearing about climate: The topic was geoengineering, and the rhetoric turned toward reality."

Elisa Bertino

- https://dblp.uni-trier.de/pers/hd/b/Bertino:Elisa.html List of Elisa Bertino's academic publications.
- https://github.com/relentless-warrior/LTEInspector GitHub page for LTEInspector.
- https://www.cbc.ca/news/technology/rcmp-surveillance-imsi-catcher-mdi-stingray-cellphone-1.4056750
 Article by Dave Seglins, Matthew Braga, and Catherine Cullen first appearing on CBC News on April 5, 2017, entitled RCMP reveals use of secretive cellphone surveillance technology for the first time."
- https://www-users.cs.umn.edu/~hoppernj/celluloc.pdf Full text of Kune, D.F., et al. 2012. Location leaks on the GSM air interface. *Proceedings of the Network System Security Symposium*, San Diego.
- https://arxiv.org/pdf/1510.07563.pdf Full text of Shaik, A., et al. 2017. Practical attacks against privacy and availability in 4G/LTE mobile communication system. *arXiv*:1510.07563.
- https://comsecuris.com/papers/UMTSprivacy.pdf Full text of Arapinis, M. 2012. New privacy issues in mobile telephone: Fix and verification. *Proceedings of the CCS '12*, Raleigh.

http://metro.cs.ucla.edu/papers/p223-tu.pdf — Full text of Tu, H., et al. 2014. Control-plane protocol interactions in cellular networks. Proceedings of SIGCOMM '14, Chicago.

Bessie Schwarz

- https://www.cloudtostreet.info/ Website for Cloud to Street, the nonprofit organization that offers a
 global high-resolution flood mapping and monitoring system, designed to protect the most vulnerable
 and enable resilience worldwide.
- https://www.gov.uk/government/news/uk-leads-the-way-to-build-back-better-after-hurricanes Press release by the UK Department for International Development and the Rt Hon, first appearing on October 13, 2017, entitled "UK leads the way to build back better after hurricanes."
- https://www.preventionweb.net/files/54328_mappingtheroleofinsuranceinmanaging.pdf Full text of Prevention Web's 2017 report, entitled "Mapping the role of insurance in managing disaster losses: Study of low and low-middle income countries."

Saul Griffith

- https://www.otherlab.com/ Learn more about Otherlab, Griffith's accelerator/incubator that works on internally developed ideas.
- http://www.climatefiles.com/climate-change-evidence/presidents-report-atmospher-carbon-dioxide/—
 Full text of the 1965 President's Science Advisory Committee report: "Restoring the quality of our
 environment: Report of the Environmental Pollution Panel."
- https://flowcharts.llnl.gov/content/energy/energy_archive/US_energy_flow_archive/UCID-17443.pdf— Full text of report in which the first Sankey energy flow diagram appears: Ramsey, W.J. 1977. U.S. energy flow in 1976. Lawrence Livermore Laboratory.
- https://www.llnl.gov/news/us-energy-use-rises-highest-level-ever Announcement by Lawrence Livermore National Laboratory's Anne Stark containing the 2018 Sankey diagram, made on April 11, 2019, entitled "U.S. energy use rises to highest level ever."
- http://energyliteracy.com/ Interactive version of Otherlab's detailed "super Sankey" diagram of 2018
 U.S. energy flow.
- https://www.otherlab.com/blog-posts/us-energy-flow-super-sankey Flat version of Otherlab's detailed "super Sankey" diagram of 2018 U.S. energy flow.
- https://www.nature.com/articles/d41586-019-03595-0 Full text of comment: Lenton, T., et al. 2019. Climate tipping points—Too risky to bet against. *Nature* **575**:592–595.
- https://www.nature.com/articles/s41586-019-1364-3 Abstract and access options for Tong, D., et al. 2019. Committed emissions from existing energy infrastructure jeopardize 1.5°C climate target. *Nature* 572:373–377.
- https://www.energy.gov/sites/prod/files/2016/12/f34/2016_billion_ton_report_12.2.16_0.pdf Full text
 of the U.S. Department of Energy report: 2016 Billion-ton report: Advancing domestic resources for a
 thriving bioeconomy.

Jags Kandasamy and Sek Chai

 https://latentai.com — The Latent AI website offers information as well as an opportunity to test drive the Latent AI demo.

Karl Friston

https://www.fil.ion.ucl.ac.uk/~karl/ — Selected list of Friston's academic publications.

Gary Marcus

- https://www.robust.ai Marcus's newly formed firm, Robust AI, seeks to build the world's first
 industrial-grade cognitive engine. (Note that, as of Dev 2019, the top of the webpage is blank; scroll
 down for content.)
- https://twitter.com/GaryMarcus Marcus is not shy about posting his opinions on Twitter.
- https://www.nytimes.com/2018/05/18/opinion/artificial-intelligence-challenges.html Article by Gary Marcus and Ernest Davis, first appearing in the New York Times on May 18, 2018, entitled "A.I. is harder than you think."
- https://www.nytimes.com/2019/09/06/opinion/ai-explainability.html Article by Gary Marcus and Ernest Davis first appearing in the *New York Times* on September 6, 2019, entitled "How to build artificial intelligence we can trust."

- https://hbr.org/2016/11/what-artificial-intelligence-can-and-cant-do-right-now Article by Andrew Ng
 first appearing in the Harvard Business Review on November 9, 2016, entitled "What artificial
 intelligence can and can't do right now."
- https://www.theverge.com/2018/1/19/16911354/google-ceo-sundar-pichai-ai-artificial-intelligence-fireelectricity-jobs-cancer — Article by Lauren Goode first appearing on the Verge on January 18, 2018, entitled "Google CEO Sundar Pichai compares impact of AI to electricity and fire."
- https://www.washingtonpost.com/news/innovations/wp/2014/10/24/elon-musk-with-artificial-intelligence-we-are-summoning-the-demon/ Article by Matt McFarland first published in the Washington Post on October 24, 2014, entitled "Elon Musk: 'With artificial intelligence we are summoning the demon.'"
- https://www.youtube.com/watch?v=2HMPRXstSvQ YouTube video published by Creative Destruction Lab on November 24, 2016, entitled "Geoff Hinton: On radiology."
- https://www.theverge.com/2019/4/22/18510828/tesla-elon-musk-autonomy-day-investor-comments-self-driving-cars-predictions Article by Andrew Hawkins first appearing on the Verge on April 22, 2019, entitled "Here are Elon Musk's wildest predictions about Tesla's self-driving cars."
- https://www.wired.com/2015/05/remaking-google-facebook-deep-learning-tackles-robotics/ Article by Cade Metz first appearing in *Wired* on March 27, 2015, entitled "Deep learning' will soon give us super-smart robots."
- https://www.wired.com/2015/08/facebook-launches-m-new-kind-virtual-assistant/ Article by Jessi Hempel first appearing in Wired on August 26, 2015, entitled "Facebook launches M, its bold answer to Siri and Cortana."
- https://www.wired.com/story/facebooks-virtual-assistant-m-is-dead-so-are-chatbots/ Article by Erin Griffith and Tom Simonite first appearing in *Wired* on January 8, 2018, entitled "Facebook's virtual assistant M is dead. So Are Chatbots."
- https://fortune.com/2018/05/25/tesla-autopilot-crash-fire-truck/ Article by Jonathan Sperling first
 appearing in Fortune on May 25, 2018, entitled "Tesla in Autopilot mode accelerated prior to crash with
 fire truck, police say."
- https://www.rcr.ac.uk/posts/nhs-does-not-have-enough-radiologists-keep-patients-safe-say-three-four-hospital-imaging Article first appearing on the website of the Royal College of Radiologists on April 4, 2019, entitled "The NHS does not have enough radiologists to keep patients safe, say three-in-four hospital imaging bosses."
- https://www.theguardian.com/technology/2019/feb/14/elon-musk-backed-ai-writes-convincing-newsfiction — Article by Alex Hern first appearing in the *Guardian* on February 14, 2019, entitled "New Al fake text generator may be too dangerous to release, say creators."
- https://www.newyorker.com/news/news-desk/is-deep-learning-a-revolution-in-artificial-intelligence —
 Article by Gary Marcus first appearing in the *New Yorker* on November 25, 2012, entitled "Is 'deep learning' a revolution in artificial intelligence?"
- https://arxiv.org/pdf/1904.01557.pdf Full text of Saxton, D., et al. 2019. Analysing mathematical reasoning abilities of neural models. *arXiv* 1904.01557v1.
- https://en.wikipedia.org/wiki/Pentium_FDIV_bug Wikipedia paage for the Pentium FDIV bug.
- https://pdfs.semanticscholar.org/08dc/7b19e679539f0f93db0192a8e8d11538b3dd.pdf Full text of Marcus, G.F. 1998. Rethinking eliminative connectionism. Cognitive Psychology 37:243–282.
- https://www.sciencedirect.com/science/article/abs/pii/S0010027798000183 Abstract and access options for Marcus, G.F. 1998. Can connectionism save constructivism? Cognition 66:153–182.
- https://arxiv.org/pdf/1801.00631.pdf Full text of Marcus, G. 2018. Deep learning: A critical appraisal. arXiv 1801:00631.
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- https://thegradient.pub/an-epidemic-of-ai-misinformation/ Article by Gary Marcus first appearing on the Gradient on November 30, 2019, entitled "An epidemic of AI misinformation."
- https://www.academia.edu/2117172/Micro-level_hybridization_in_the_cognitive_architecture_DUAL —
 Full text of Kokinov, B., 1999. Micro-level hybridization in the cognitive architecture DUAL. Pages 197–
 208 in R. Sun and F. Alexander, editors. Connectionist-Symbolic Integration: From Unified to Hybrid
 Approaches. Hillsdale, New Jersey, Lawrence Erlbaum Associates.

- https://cs.nyu.edu/davise/papers/CommonsenseFinal.pdf Full text of Davis, E., and G. Marcus. 2015. Commonsense reasoning and commonsense knowledge in artificial intelligence. Communications of the ACM 58.
- https://www.theguardian.com/technology/2016/aug/15/roomba-robot-vacuum-poopocalypse-facebookpost — Article by Olivia Solon first appearing in the Guardian on August 15, 2016, entitled "Roomba creator responds to reports of 'poopocalypse': 'We see this a lot.'"
- https://www.forbes.com/sites/cognitiveworld/2019/07/03/what-ai-can-learn-from-romeo-juliet/#74d2d8401bd0 — Article by Doug Lenat first published in Forbes on July 3, 2019, entitled "What Al can learn from Romeo & Juliet."

Will Hayes

- https://lucidworks.com Learn more about Lucidworks and its predictive answer engine.
- https://www.madmagazine.com Mad Magazine was one of Hayes's childhood favorites.
- https://www.reddit.com Reddit now fills Hayes's needs for irreverence."

Alexander Reben

- https://areben.com Explore projects in Reben's portfolio here."
- https://areben.com/project/amalgan/ Steps and outcomes of Reben's amalGAN project.
 https://thispersondoesnotexist.com Every reload of the This Person Does Not Exist webpage displays a new image of a face generated by a generative adversarial network.

Richa Batra

• https://www.nature.com/articles/s41586-019-1022-9 — Abstract and access options for Batra's paper: Li. S., et al. 2019. Particle robotics based on statistical mechanics of loosely coupled components. Nature **567**:361–365.

Mita Yun

https://www.kiki.ai — Learn more about Kiki and, if desired, preorder one for yourself.

Daniel Faber

• https://www.orbitfab.space — Learn more about Orbit Fab's vision and its products: rapidly attachable fluid transfer interface, rigid tanker ISS prototype (gen-1 tanker), and flextank ISS prototype.

Marko Papic

- https://www.cambridge.org/core/journals/american-political-science-review/article/power-politics-andinternational-trade/B5C498A482F081DEF06F6287E80AA7D6 — Abstract and access options for Gowa, J. and E.D. Mansfield. 1993. Power politics and international trade. American Political Science Review 87:408-420.
- https://www.pnas.org/content/116/20/9808 Full text of Diffenbaugh, N.S., and M. Burke. 2019. Global warming has increased global economic inequality. Proceedings of the National Academy of Sciences of the United States of America 116(20):9808-9813.

Renee DiResta

- https://disinformationreport.blob.core.windows.net/disinformation-report/NewKnowledge-Disinformation-Report-Whitepaper.pdf — Full text of DiResta's December 2018 report for the Senate Select Committee on Intelligence, entitled "The tactics & tropes of the Internet Research Agency"; a brief overview by Christina Pineda of the Homeland Security Digital Library can be found at https://www.hsdl.org/c/tactics-and-tropes-of-the-internet-research-agency/.
- https://www.youtube.com/watch?v= fHfgU8oMSo YouTube video first uploaded by Deadspin on April 2, 2018, entitled "Sinclair's soldiers in Trump's war on media."
- https://www.npr.org/2019/12/04/784883378/how-taiwan-is-bracing-itself-against-a-new-wave-ofdisinformation-ahead-of-elect — Listen or read the transcript of NPR All Things Considered story by Emily Feng, first aired on December 4, 2019, entitled "How Taiwan is bracing itself against a new wave of disinformation ahead of elections."