



EDUCATION

- Massachusetts Institute of Technology**, Cambridge, MA September 2019 - Present
PhD Candidate in Media Arts and Sciences at the MIT Media Lab's Human Dynamics group.
- Massachusetts Institute of Technology**, Cambridge, MA Graduated May 2019
Masters in Media Arts and Sciences at the MIT Media Lab's Scalable Cooperation group.
• Thesis: *Untangling the Knotty Web of AI*, advised by Iyad Rahwan
- Pomona College**, Claremont, CA Graduated May 2017
Cum laude with Computer Science and Mathematics double major, Media Studies minor. GPA 3.88/4.00
• Thesis in Mathematics: *Data Representation as Low Rank Matrix Factorization*, advised by Blake Hunter
• Thesis in Media Studies: *The Mediasphere: Intermediation with Digital Planetaria*, advised by Kim-Trang Tran
- Aquincum Institute of Technology**, Budapest, Hungary Fall 2015

EXPERIENCE

- Facebook, Inc.**, New York, NY May 2019 - August 2019
Intern in Core Data Science on the Facebook and Society team
• Conducted causal inference and trained machine learning models at Facebook scale as part of a independent research project to detect and understand the proliferation of misinformation.
- Massachusetts Institute of Technology**, Cambridge, MA June 2015 - August 2016
Researcher and software developer for Laboratory for Social Machines at MIT Media Lab
• Designed and implemented web scraper, back-end database and visualization interface as a functional component of LSM's JMAP/Electome project to navigate, quantify, aggregate and understand online journalism and in particular the 2016 Presidential Election. Affiliated with the MIT Summer Research Program, then rehired as private contract.
- Yale University**, New Haven, CT October 2012 - Present
Data Science Researcher at Human Cooperation Lab
• Design experiments and computational models, collect/analyze data and write papers to study and quantify human cooperation within an interdisciplinary environment. Funded by Pomona College Summer Internship Grant.
- Harvard University**, Cambridge, MA June 2012 - October 2012
Intern at Moral Cognition Lab
• Designed experiments, ran in-lab studies and learned literature for moral psychology as only high-school student in upper division summer internship program.

EXTRACURRICULAR ACTIVITIES

- Co-founder of the ELIZA AI Art collective**, Cambridge, MA January 2018 - Present
Founded and operate AI-based art collective that features artwork internationally. See more at <https://eliza-collective.github.io>
- Planetarium Operator**, Claremont, CA January 2016 - May 2017
Create planetarium content, develop software, maintain hardware, present shows and chair community engagement for Pomona's digital 25-foot planetarium.
- Liason to Pomona Math Department**, Claremont, CA June 2014 - May 2016
Plan department activities and serve as intermediary between Pomona math students and professors.
- Teaching Assistant for Linear Algebra**, Claremont, CA August 2016 - December 2016

PUBLICATIONS

Pre-prints/under review

- Pennycook G, **Epstein ZG**, Mosleh M, Arechar, A, Eckles D, & Rand, D. Understanding and reducing the spread of misinformation online. Available at <https://psyarxiv.com/3n9u8/>
- Groh, M, **Epstein ZG**, Obradovich, N, Cebrian, C & Rahwan, I. Human detection of machine manipulated media. Under review at *Psych Science*. Available at <https://arxiv.org/pdf/1907.05276>

Published

- **Epstein ZG**, Pennycook, G & Rand, DG. Letting the crowd steer the algorithm: Laypeople can effectively identify misinformation sources. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI'20) Available at <https://psyarxiv.com/z3s5k/download?format=pdf>
- **Epstein ZG**, Peysakhovich, A. & Rand, DG. The Good, the Bad, and the Unflinchingly Selfish: Cooperative decision-making can be predicted with high accuracy using only three behavioral types. *Proceedings of the Conference on Economics and Computation* July 2016. Available at http://papers.ssrn.com/abstract_id=2737983
- Devadoss, S, **Epstein ZG**, & Smirnov, D. Visualizing Scissors Congruence. *Symposium on Computational Geometry* June 16, 2016. Application available online at <http://dmsm.github.io/scissors-congruence>
- Rand DG, & **Epstein ZG**. Risking Your Life Without a Second Thought: Intuitive Decision-Making and Extreme Altruism. *PLoS ONE* October 15, 2014. Listed as one of the Top 10 Insights from the Science of a Meaningful Life in 2014 by the Greater Good Science Center at UC Berkeley.
- Padula WV, ... , **Epstein ZG**, ... et al. Using Clinical Data to Predict High-cost Performance Coding Issues Associated with Pressure Ulcers: a multilevel cohort model. *Journal of the American Medical Informatics Association (JAMIA)*, 2016. In Press.
- Padula WV, Makic MBF, **Epstein ZG**, Gemmel J & Meltzer DO. Using Machine Learning to Populate A Markov Model by Mining Big Data Directly from a Hospital EHR. Society of Medical Decision Making (SMDM) 37th Annual North American Meeting; St Louis, MO, October 2015.
- Padula WV, Allen RR, **Epstein ZG** & Nair KV. Determining the cost of obesity and common comorbidities from a commercial claims dataset. Health Economics Workshop, University of Chicago; February 27, 2014.

WORKS FEATURED

- *Deep Angel Shadow Sans Substance* featured at Ars Electronica (2019)
- **Epstein ZG**, Epstein MH, Almenar, C, Cebrian, M. Six Degrees of Separation at Burning Man. Nautilus. 2019. Available at <http://nautil.us/issue/74/networks/six-degrees-of-separation-at-burning-man>
- First Place in 5C Hackathon Advanced category. Built shortest path finding system for Wikipedia (April 2015)
- D21 Sponsor Prize winner at the Stanford TreeHacks hackathon. Build online political conflict analysis metric using D21 voting paradigm (February 2015)
- People's choice award in 5C Hackathon Advanced Category. Build multiplayer, 3D snake; available at <http://tinyurl.com/snakesonahyperplane> (April 2016)

AWARDS

- NSF Vizzies Winner - The National Science Foundation's top data visualization award (2018)
- Barry M. Goldwater Scholar— highly competitive national award for future scientists (2016)
- The Jaeger Mathematics Prize – awarded to a student for excellence in mathematics (September 2014)
- Pomona College Scholar (Fall 2013, 2014 and Spring 2014)

SERVICE

Reviewed papers for IC2S2 2020, ICWSM 2020

SELECTED COURSE WORK

Experimental Design and Causal Inference (MIT), Ethics and Governance of Artificial Intelligence (MIT/Harvard), Advanced Graduate Machine Learning (MIT), Markets, Networks and Crowds (Harvard), Imagination, Computation, and Expression (MIT), Designing for Empathy (MIT IAP), Time Series Statistics (Pomona), Functional Analysis (Pomona), Algorithms (Harvey Mudd), Quantum Information Theory (Budapest University of Technology and Economics)