# Amy A. Winecoff

# Princeton University, Center for Information Technology Policy (CITP) aw0934@princeton.edu

# **ACADEMIC**

Ph.D. Psychology & Neuroscience

2014

**BACKGROUND** Duke University, Durham, NC

- Dissertation title: Domain-general affect: Neural mechanisms and clinical implications
- Preparing Future Faculty Fellow (Fall 2012-Spring 2013)
- Summer Institute in Cognitive Neuroscience Fellow (Summer 2011)
- James B. Duke Graduate Fellowship Award (2009-2013)
- National Science Foundation Graduate Research Fellowship Honorable Mention (2008 & 2009)

#### B.A. Visual Arts Applications

2007

North Carolina State University, Raleigh, North Carolina

- Summa Cum Laude
- Phi Beta Kappa

#### EMPLOYMENT DataX Data Scientist HISTORY

October 2020 - Present

Princeton University, Center for Information Technology Policy, Princeton, NJ

- Co-leading a semi-structured interview and ethnographic study on how web3 companies and investment firms think about the ideology of web3 and respond to business pressures.
- Designed and conducted a qualitative semi-structured interview study study on how artificial intelligence startups' adapt to external pressures such as those from investors and regulators.
- Contributed to an open-source toolkit for developing agent-based simulations of recommender systems. Wrote classes for evaluating model performance and for conducting statistical diagnostics of aggregate metrics. Proposed an empirical framework for conducting simulation experiments.
- Collaborated with colleagues to evaluate the structure of political discourse on Reddit and to evaluate the effect of forum reactions (e.g., upvote, downvote) on political speech.
- Supervised an undergraduate research student on an independent project related to mindful consumption of videos online.

Senior Data Scientist

January 2020 - September 2020

Chewy, Boston, MA

• Developed and implemented a system for recommending products based on users' reported pet characteristics and pet health

Senior Data Scientist

November 2017 - January 2020

True Fit, Boston, MA

- Researched, developed, and evaluated fashion style recommender and search systems. Designed and conducted qualitative and quantitative user research.
- Led a team of three data scientists through the launch of a fashion style recommendation product.

Research Scientist

August 2016 - November 2017

Charles River Analytics, Cambridge, MA

Collaborated with external academic researchers and internal engineers to prototype technologies for government agencies (e.g., US Air Force, Department of Transportation).

Assistant Professor of Psychology

July 2014 - July 2016

Bard College, Annandale-on-Hudson, NY

 Lead an undergraduate research lab. Published empirical research and review chapters on human psychology and psychopathology. Taught 10 courses. Supervised 10 senior thesis projects.

## CONFERENCE PROCEEDINGS

See also my google scholar page.

- 2. Winecoff, A., & Watkins, E. A. (2022). Artificial concepts of artificial intelligence: Institutional compliance and resistance in AI startups. Forthcoming In Proceedings of the 2022 AAAI/ACM Conference on AI, Ethics, and Society.
- Winecoff, A., Brasoveanu, F., Casavant, B., Washabaugh, P., & Graham, M. (2019). Users in the loop: A psychologically-informed approach to similar item retrieval. In *Proceedings of the 13th ACM Conference on Recommender* Systems (pp. 52-59).

## JOURNAL ARTICLES

- 7. Sweitzer, M. M., Watson, K. K., Erwin, S. R., Winecoff, A., Datta, N., Huettel, S., Platt, M. & Zucker, N. L. (2018). Neurobiology of social reward valuation in adults with a history of anorexia nervosa. *PloS One*, 13(12), e0205085.
- 6. King, A., Kaighobadi, F., & Winecoff, A. (2016). Brief report: A health belief model approach to men's assessment of a novel long-acting contraceptive. Cogent Medicine, 3(1), 1250320.
- 5. Winecoff, A., Ngo, L., Moskovich, A., Merwin, R., Zucker, N. (2015). The functional significance of shyness in anorexia nervosa. European Eating Disorders Review, 23(4), 327-332.
- 4. Winecoff, A., Clithero, J. A., Carter, R. M., Bergman, S. R., Wang, L., & Huettel, S. A. (2013). Ventromedial prefrontal cortex encodes emotional value. Journal of Neuroscience, 33(27), 11032-11039.
- 3. Winecoff, A., LaBar, K. S., Madden, D. J., Cabeza, R., & Huettel, S. A. (2011). Cognitive and neural contributors to emotion regulation in aging, Social Cognitive and Affective Neuroscience. 6(2), 165-176.
- 2. Chang, S. W., Winecoff, A., & Platt, M. L. (2011). Vicarious reinforcement in rhesus macaques (Macaca mulatta). Frontiers in Neuroscience, 5, 27.
- 1. O'Dhaniel, A., Detwiler, J. M., Winecoff, A., Dobbins, I., & Huettel, S. A. (2011). Infrequent, task-irrelevant monetary gains and losses engage dorsolateral and ventrolateral prefrontal cortex. *Brain Research*, 1395, 53-61.

# WORKSHOP PAPERS & PRESENTATIONS

- 4. Lenhard, J., & Winecoff, A. What web3 calls thinking from democratisation to inequality in blockchain ideologies. Presentation at Anthropology, AI, and the Future of Human Society.
- 3. Winecoff, A., Sun, M., Lucherini, E., & Narayanan, A. (2021). Simulation as experiment: An empirical critique of simulation research on recommender systems. Paper presented at the SimuRec Workshop at the 15th ACM Conference on Recommender Systems.

- Papakyriakopoulos, O., Watkins, E. A., Winecoff, A., Jaźwińska, K., & Chattopadhyay, T. (2021). Qualitative analysis for human centered AI. Paper presented at the Human-Centered AI Workshop at the Conference on Neural Information Processing Systems (NeurIPS)
- Sherman, J., Shukla, C., Textor, R., Zhang, S., & Winecoff, A. (2019). Assessing fashion recommendations: A multifaceted offline evaluation approach.
  Paper presented at the FashionXRecSys Workshop at the 13th ACM Conference on Recommender Systems

#### **PREPRINTS**

- 3. Papakyriakopoulos, O., Engelmann, S., & Winecoff, A.. (2022, submitted) The impact of social media reaction design on political discourse: A quasi-experimental analysis of 155 million comments on Reddit.
- 2. Lucherini, E., Sun, M., Winecoff, A., & Narayanan, A. (2021). T-RECS: A simulation tool to study the societal impact of recommender systems. arXiv preprint arXiv:2107.08959.
- Khaziev, R., Casavant, B., Washabaugh, P., Winecoff, A., & Graham, M. (2019). Recommendation or discrimination?: Quantifying distribution parity in information retrieval systems. arXiv preprint arXiv:1909.06429.

### BOOK CHAPTERS

- (b) Winecoff, A., & Huettel, S. A. (2017). Cognitive control and neuroe-conomics. In Egner, T. (Ed.) *The Wiley Handbook of Cognitive Control*, (pp. 408-421).
- (a) Jacques, P. L. S., **Winecoff, A.**, & Cabeza, R. (2013). Emotion and aging. In Armony, J., & Vuilleumier, P. (Eds.), *The Cambridge Handbook of Human Affective Neuroscience*, (pp. 635-661).

#### **TEACHING**

- The Social Brain (PSY 368) Evaluations Fall 2014, (Bard College)
- Causes and Consequences of Eating Disorders (PSY 354) Evaluations Spring 2015, Spring 2016 (Bard College)
- Advanced Methods in Abnormal Psychology (PSY AB) Evaluations Fall 2015, Spring 2016 (Bard College)
- Adult Abnormal Psychology (PSY 210) Evaluations Fall 2015 (Bard College)
- Psychology of Emotion (PSY 218) Spring 2015 (Bard College)
- Introduction to Psychological Science (PSY 141) Evaluations Fall 2015 (Bard College)
- Seminar in Neuroscience (NEU 495) Evaluations Spring 2013 (Elon University)