3607 CLAWSON RD, APT A
AUSTIN, TX, 78704
AAWINECOFF@GMAIL.COM

AMY WINECOFF

EDUCATION

DUKE UNIVERSITY — *PhD in Psychology & Neuroscience*

September 2009 - May 2014, Durham, NC

NORTH CAROLINA STATE UNIVERSITY — *BA in Visual Arts Applications*

September 2002 - May 2007, Raleigh, NC

EXPERIENCE

Princeton University, Princeton, NJ — *Research Fellow,* 10/2020 - PRESENT
- Led qualitative interview studies with over 70 startup founders, venture capitalists, and responsible AI professionals to understand practical and cultural barriers to ethical technology development. Published results at AIES '22 (acceptance rate: 34%) [Dedoose, ATLAS.ti]
- Conducted quantitative research on the impact of design choices on political discourse on Reddit. Developed a robust data infrastructure in Google Cloud, which enabled analysis of over 150M posts. Published findings at CHI '23 (acceptance rate: 28%)[Python, SQL, Google Cloud, R]
- Contributed to an open-source toolkit for simulating the long-term societal impact of recommender systems. Proposed a framework based on experimental research methods for using agent-based simulations to understand the causal mechanisms of algorithmic harms [Python]
- Provided scientific guidance and mentorship to three postdoctoral researchers, two graduate students, one post-baccalaureate fellow, and one undergraduate on a weekly or bi-weekly basis. Nurtured a supportive and collaborative environment, empowering team members to excel in their research and professional pursuits

Chewy, Boston, MA — *Senior Data Scientist,* 01/2020 - 09/2020
- Developed an innovative, user-centered product recommendation system to help pet owners discover health-focused products [Python, SQL]

True Fit, Boston, MA — *Senior Data Scientist & Manage,* 11/2017 - 9/2020
- Developed a testing platform that allowed the data science team for the first time to conduct assessments of users' responses to different ML recommendation strategies. Using this platform, demonstrated that a human-centered item-retrieval approach surpassed the performance of standard models. Published results at RecSys '19 (acceptance rate: 19%), where the paper was nominated for the best paper award [Python, R, JavaScript]
- Managed a team of three data scientists in successfully launching True Fit's first fashion style recommendation product. Collaborated with

product managers, engineers, and customer success managers to facilitate smooth rollout across several major fashion retailers

Charles River Analytics, Cambridge, MA — *Socio-cognitive Systems Scientist,* 08/2016 - 10/2017

- Employed supervised and unsupervised machine learning methodologies to identify factors contributing to motorcycle crashes, research that played a pivotal role in the development of an augmented reality headset for enhancing motorcycle safety [R]
- Designed prototypes for research software that improves the methodology of social science research. These designs were instrumental in securing $1 million in additional DARPA funding for the project [Balsamiq]

Bard College, Annandale-on-Hudson, NY — *Assistant Professor,* 07/2014 - 07/2016

- Directed an undergraduate research lab dedicated to human emotion and decision-making processes [MATLAB, R, SPSS, E-Prime]
- Developed and delivered 10 highly regarded courses, covering topics such as human decision-making, emotion, and psychopathology

PUBLICATIONS

Conference Proceedings

Papakyriakopoulos, O., Engelmann, S., & **Winecoff, A.** (2023). Upvotes? Downvotes? No Votes? Understanding the relationship between reaction mechanisms and political discourse on Reddit. In *Proceedings of the CHI Conference on Human Factors in Computing Systems.*

Winecoff, A., & Watkins, E. A. (2022). Artificial concepts of artificial intelligence: Institutional compliance and resistance in AI startups. In *Proceedings of the 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 ACM Conference on Recommender Systems.*

Workshop Papers

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 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.*

Pre-Prints

Winecoff, A., & Lenhard, J. (2023, submitted). Techno-utopians, scammers, and bullshitters: The promise and peril of Web3 and blockchain technologies according to operators and venture capital investors.

Ahlawat, A., **Winecoff, A.**, & Mayer, J. (2023, submitted) Minimum viable ethics: Organizational challenges, strategies, and opportunities of industry AI ethics. Draft available upon request.

Ahmed, S., Jaźwińska, K., Ahlawat, A., **Winecoff, A.**, & Wang, M. (2023, in prep). Building the epistemic community of AI safety. Draft available upon request.

Lucherini, E., Sun, M., **Winecoff, A.**, & Narayanan, A. (2021). <u>T-RECS: A simulation tool to study the societal impact of recommender systems</u>.

Khaziev, R., Casavant, B., Washabaugh, P., Winecoff, A., & Graham, M. (2019). <u>Recommendation or discrimination?: Quantifying distribution parity in information retrieval systems</u>.

Journal Articles

Sweitzer, M. M., Watson, K. K., Erwin, S. R., **Winecoff, A.**, Datta, N., Huettel, S., Platt, M. & Zucker, N. L. (2018). <u>Neurobiology of social reward valuation in adults with a history of anorexia nervosa</u>. *PloS One*, 13(12), e0205085.

King, A., Kaighobadi, F., & **Winecoff, A.** (2016). <u>Brief report: A health belief model approach to men's assessment of a novel long-acting contraceptive</u>. *Cogent Medicine*, 3(1), 1250320.

Winecoff, A., Ngo, L., Moskovich, A., Merwin, R., & Zucker, N. (2015). <u>The functional significance of shyness in anorexia nervosa</u>. *European Eating Disorders Review*, 23(4), 327-332.

Winecoff, A., Clithero, J. A., Carter, R. M., Bergman, S. R., Wang, L., & Huettel, S. A. (2013). <u>Ventromedial prefrontal cortex encodes emotional value</u>. *Journal of Neuroscience*, 33(27), 11032-11039.

Winecoff, A., LaBar, K. S., Madden, D. J., Cabeza, R., & Huettel, S. A. (2011). <u>Cognitive and neural contributors to emotion regulation in aging</u>, *Social Cognitive and Affective Neuroscience*. 6(2), 165-176.

Chang, S. W., **Winecoff, A.**, & Platt, M. L. (2011). <u>Vicarious reinforcement in rhesus macaques (Macaca mulatta)</u>. *Frontiers in Neuroscience*, 5, 27.

O'Dhaniel, A., Detwiler, J. M., **Winecoff, A.**, Dobbins, I., & Huettel, S. A. (2011). <u>Infrequent, task-irrelevant monetary gains and losses engage dorsolateral and ventrolateral prefrontal cortex</u>. *Brain Research*, 1395, 53-61.

Book Chapters

Winecoff, A., & Huettel, S. A. (2017). Cognitive control and neuroeconomics. In Egner, T. (Ed.) *The Wiley Handbook of Cognitive Control*, (pp. 408-421).

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).

SELECTED INVITED TALKS

[How people, institutions, and culture shape AI systems](#). Santa Fe Institute. July 12th, 2023.

[How to build slightly less evil AI](#). Center for Digital Strategies, Dartmouth Tuck School of Business. April 3rd, 2023.

[Today's machine learning needs yesterday's social science](#). Center for Information Technology Policy, Princeton University. April 19th, 2022.