

Matt Viana

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EDUCATION

Pennsylvania State University | University Park, PA

Ph.D. in Informatics and Intelligent Systems | Aug 2025 – Present

- **Advisor:** Dr. Dana Calacci
- **Scholarship:** Recipient of the Rednor Graduate Fellowship and ICDS Rising Researcher funding.

Pennsylvania State University | University Park, PA

B.S. in Data Science, Minor in Computer Science | Aug 2022 – May 2025

RESEARCH INTERESTS

My research operates at the intersection of human-computer interaction and AI interpretability, focusing on the internal decision-making processes of Large Language Models (LLMs). I investigate how user interactions with these complex 'black box' systems can change and expose unintended model behaviors, such as my previous collaboration on uncovering sycophancy and perspective mimesis. The goal is to move beyond simply observing these behaviors by building user-facing tools to probe, understand, and ultimately steer the model's internal logic, enhancing its transparency and reliability to create safer, more aligned human-AI collaborations.

PUBLICATIONS

- Jain, S., Park, C., **Viana, M. M.**, Wilson, A., & Calacci, D. (2025). *Extended AI Interactions Shape Sycophancy and Perspective Mimesis*. arXiv preprint arXiv:2509.12517. (Submission to ACM CHI Conference on Human Factors in Computing Systems)

MANUSCRIPTS & WORKING PAPERS

- **Viana, M.**, Erickson, P., Calacci, D. "Active Negotiation: How Users Interact With and Adopt Large Language Models." (Draft available upon request).
 - Qualitative study of 36 knowledge workers proposing the Active Negotiation Framework (ANF) to model how users mitigate AI failures.
- **Viana, M.**, Jain, B., Calacci, D. "How Context Influences LLM Assumptions." (In progress).
 - Audit study investigating how extended conversation history triggers LLMs to infer user demographics (race, gender, SES).
- **Viana, M.**, Calacci, D. "I Wish it Wouldn't Lie: Addressing Trust Eroding Design in LLMs." (In progress).
 - Designing a multi-feature conversational interface to measure the impact of granular

feedback and proactive disclaimers on user trust calibration.

AWARDS AND FELLOWSHIPS

- **Rednor Graduate Fellowship**, College of Information Sciences and Technology, 2025-2026
- **ICDS Rising Researcher Grant**, Institute for Computational and Data Sciences, Pennsylvania State University, 2025

RESEARCH EXPERIENCE

Graduate Research Assistant | Working Futures Network, Penn State Supervisor: *Dr. Dana Calacci* | Aug 2025 – Present

- Investigate user behavior and adoption patterns of Large Language Models (LLMs) in real-world settings.
- Conduct qualitative research and system audits to identify security vulnerabilities and privacy concerns in AI systems.
- Develop novel user feedback mechanisms to mitigate AI mirroring behaviors such as sycophancy and perspective mimesis.
- Collaborate on research projects exploring the interpretability of "black box" AI models.

MENTORING EXPERIENCE

Graduate Mentor | Pennsylvania State University

June 2025 – Present

- Mentored Patrick Erickson (Undergraduate, B.S. in Data Science) on a research project focused on the adoption and integration of LLMs.

SKILLS

- **Research Methods:** Qualitative Analysis, AI Auditing, User Studies, Human-Computer Interaction (HCI)
- **Technical:** Machine Learning, Artificial Intelligence, Natural Language Processing
- **Programming:** Python, R, SQL

REFERENCES

Available upon request.