Jack Thompson

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Education

Princeton University, Princeton, NJ | Expected Graduation: May 2027

- **A.B. in Computer Science**, minors in Philosophy and in Cognitive Science
- **GPA:** 3.85/4.0
- **Relevant Coursework:** Mathematics for Machine Learning; Non-Classical Logic; Consciousness, the Mind-Body Problem, and the Self; Cognitive Neuroscience; Algorithms and Data Structures; Computer Systems; Strategy & Information; Computational Models of Cognition

Research & Technical Experience

Digital Sentience Researcher | Princeton Neuroscience Institute | Princeton, NJ
Advisor: Dr. Michael Graziano | Jan 2026 - Ongoing

- Developing a model organism

Lead Author & Research Assistant | Princeton Neuroscience Institute | Princeton, NJ
Advisor: Dr. Kirsten Ziman | Jan 2024 - Aug 2025

- Leading an interdisciplinary social psychology & AI alignment methods paper (forthcoming 2026), using human-in-the-loop techniques to improve LLM interpretability.
- Fine-tuning large language models (e.g., Llama, Qwen) to generate synthetic training data based on human descriptions of machine attention.
- Training smaller, more interpretable models on a combined dataset of synthetic and human-generated data to limit capacity for misalignment and increase transparency.
- *Initial Role (June - August 2024):* Overhauled experimental code from a previous human-subjects study to create a fully reproducible data analysis pipeline. Caught several discrepancies between reported results and initial data, resulting in an update to the paper before publication.

Research Assistant | Remote
Author & Journalist: Martha Brockenbrough | 2020 - May 2023

- Provided research and editorial support for an acclaimed book on artificial intelligence to educate young students (“Future Tense,” 2024).
- Edited chapters for scientific accuracy and readability, ensuring complex topics like neural networks and reinforcement learning were accessible to a non-technical audience.
- Reported on new developments from OpenAI, including early experimentation with GPT-2.
- Analyzed future social impact of AI exceeding human performance in high-status competitions, drawing examples from cultural reactions to AlphaGo and Deep Blue.

Projects & Publications

Independent Researcher & Writer | jacktlab.substack.com
2024 - Present

- Publish weekly investigating technical work in philosophy of mind and game theory.
- Focusing on semantics & meaning in computation, functional/updateless decision theory, and the game

theory of self-modification.
- Followed by prominent Effective Altruist-circle bloggers like Matthew Adelstein, Amos Wollen, Silas Abrahamson, and Florence Bacus, as well as decision theorists Jesse Clifton and Wei Dai.

Leadership & Teaching Experience

Organizer & Governance Leader | Princeton AI Alignment | Princeton, NJ
Sep 2025 - Ongoing
- Teaching introductory reading groups in AI Alignment for new students
- Runs PAIA's new governance workshops

Debater & Researcher | Princeton Ethics Bowl Team | Princeton, NJ
Sep 2024 - Dec 2025

- Researched and prepared arguments on contemporary ethical issues, specializing in AI and technology ethics.
- Collaborated with a team of 4 debaters to analyze cases and develop principled positions for competition.
- Achieved a 2-1 record at the Northeast Regional competition.

Learning Mentor | College Bright | Princeton, NJ
Oct 2025 - Ongoing

- 1-on-1 mentoring in calculus & independent learning skills

Junior Instructor | Future Genius | Montpelier, Vermont
June - July 2021

- Taught game development and entrepreneurship to middle school students, using the UN Sustainable Development Goals as a framework for project-based learning.
- Mentored two cohorts of 15 students each from rural schools; the majority of students had never coded before.
- All students developed a working prototype game by the end of one week and pitched to parents and community members for votes of investment.

Workshop Teacher | Princeton University & Vermont Independent Learners Consortium
Various Dates

- Designed and led workshops on applying spaced repetition systems (SRS) for effective learning and long-term memory retention.
- Filled initial 50+ person registration cap for Princeton Wintersession workshops.

Skills

- **Programming:** Python (PyTorch, 🤗Transformers, Pandas), C, C#, Java, R, ARM Assembly, Bash
- **AI/ML:** Running and fine-tuning SOTA models (Llama, Qwen, etc.) on HPC clusters, Mechanistic Interpretability
- **Game Dev:** Unity, Godot Engine
- **Languages:** English (Native), French (Intermediate)