T. Ben Baker, JD PhD

AI Strategy and Ethics Consultant | Interdisciplinary Researcher | Policy Advisor
tbbaker@colby.edu | Falmouth, ME

PROFESSIONAL SUMMARY

Philosopher of AI & cognition with technical and interdisciplinary expertise. Researcher, educator, and advisor on AI development and ethical implications. Peer reviewed publications on AGI, agent complexity, neural representation; developed novel approach to computational analysis of human movement. Also trained in law, ethics, cognitive and computational neuroscience, with demonstrated ability to communicate complex ideas across disciplines. Able to integrate conceptual and technical expertise with ethical and legal considerations to help organizations develop effective and responsible AI solutions.

CORE COMPETENCIES

- **Philosophy of AI:** theoretical expertise applicable for system design and human-AI interaction
- **Ethics, Law & Policy:** Ethical, legal and regulatory frameworks, social impact assessment
- **Interdisciplinary Integration:** Bridge conceptual and empirical research, facilitate collaboration across fields
- **Technical Skills:** Machine learning, statistical analysis, computer vision, language models, Python, Git
- **Communication:** Technical writing, public speaking, education, stakeholder engagement

PROFESSIONAL EXPERIENCE

- **Colby College & Davis AI Institute, Assistant Professor & AI Fellow** *2023–present*
  Waterville, ME
  – Lead interdisciplinary research on AI, cognition, and human values
  – Develop collaborations with scientists, technologists, and arts organizations
  – Design and teach courses bridging Philosophy of Mind, Cognitive Science, AI, and Ethics
  – Serve on AI policy committees and advisory boards
- **University of Pennsylvania, Provost Postdoctoral Fellow** *2020–2023*
  Philadelphia, PA
  – Conducted research in computational neuroscience and machine learning
  – Published interdisciplinary research in top-tier journals

EDUCATION

- **University of Pennsylvania, PhD Philosophy (Cognitive Science focus)** *2020*
  Philadelphia, PA
  – Dissertation: "Cognition in Nature: Information, Explanation, Embodiment"
  – Graduate Certificate in Social, Cognitive & Affective Neuroscience
  – Dean's Award for Distinguished Teaching by a Graduate Student
- **Yale Law School, JD** *2014*
  New Haven, CT
  – Lowenstein International Human Rights Clinic
  – Substantial Analytic Writing: "Less Than Murder" (criminal law & mental states)
- **Brown University, BA Philosophy (honors) & Economics** *2010*
  Providence, RI

SELECTED PROJECTS

- **Rethinking Artificial General Intelligence** *2026*
  Routledge invited chapter (forthcoming)
  – Authored invited book chapter proposing a non-anthropomorphic framework for understanding AGI
  – Synthesized insights from philosophy of mind, AI systems design, and cognitive science
  – **Framework:** "Four Ps" for AI development: Preservation, Progress, Person, Politic
  – **Impact:** Provides value-oriented alternative to anthropomorphic definitions of AI progress
- **Use & Usability: Representation in Brains and AI Systems** *2025*
  Neurons, Behavior, Data Analysis (forthcoming)
  – Collaborated with computer scientists, neuroscientists, and philosophers to clarify the concept of representation as used in these fields
  – Joint publication with researchers from Columbia, Stanford, Carnegie Mellon, and others
  – **Method:** Generative Adversarial Collaboration across Philosophy, Neuroscience, AI
  – **Impact:** Advances theoretical understanding of how AI systems represent knowledge
- **Understanding Complexity Through Affordances** *2025*
  Minds and Machines
  – Introduced formal account of agent complexity via affordances theory
  – Connected philosophy of action with robotics applications
  – **Applications:** AI design, robot behavior evaluation, human-robot interaction
  – **Impact:** Provides theoretical foundation for designing more intuitive AI systems
- **Computational Kinematics of Dance** *2024*
  Frontiers in Robotics and AI (2024)
  – Developed interpretable, low-cost ML pipeline to classify Hip Hop dance genres from 3D pose data using custom features
  – Led conceptual design; first-authored peer-reviewed paper
  – **Tools:** Auto-sklearn, AIST++ dataset, 3D pose processing, feature engineering
  – **Impact:** Demonstrates potential for movement analysis in healthcare, robotics, and human-computer interaction
- **Three Aspects of Representation in Neuroscience** *2022*
  Trends in Cognitive Sciences (2022)
  – Well-cited feature review article examining representation in biological and artificial systems
  – Synthesized philosophical analysis with neuroscience research
  – **Impact:** 80+ citations, influences ongoing debates in cognitive science and AI

SPEAKING & ENGAGEMENT

- **What does it mean to be human?** *2025*
  Loomis Chaffee School, convocation
- **Moving Between Genres: Computational Exploration of Dance** *2025*
  Slippage: 3D Humanities Series, Northwestern University
- **Technology and Cognition Symposium** *2025*
  Southern Society for Philosophy and Psychology
- **Rethinking Artificial General Intelligence** *2025*
  Oberlin College Philosophy Colloquium
- **Dance Machines! Public Lecture** *2024*
  James Madison University, Philosophy & Dance departments