Stanford

Rosa Cao

Assistant Professor of Philosophy

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor, Philosophy
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Wu Tsai Neurosciences Institute

PROGRAM AFFILIATIONS

- Symbolic Systems Program

Teaching

COURSES

2023-24

- Philosophy and Science Fiction: PHIL 7N (Win)
- Philosophy of Neuroscience: PHIL 167D, PHIL 267D, SYMSYS 167D (Win)

2021-22

- Citizenship in the 21st Century: COLLEGE 102 (Win)
- Explanation in Neuroscience: PHIL 368A (Aut)
- Philosophy of Biology: PHIL 168R, PHIL 268R (Aut)
- Philosophy of Neuroscience: PHIL 167D, PHIL 267D, SYMSYS 167D (Win)

2020-21

- Philosophy and Science Fiction: PHIL 7N (Aut)
- Philosophy of Neuroscience: PHIL 167D, PHIL 267D, SYMSYS 167D (Win)
- Topics in Neuroscience: PHIL 368A (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Grace Huckins, Luke Pistol, Lara Spencer

Doctoral Dissertation Advisor (AC)

Imran Thobani

Publications

PUBLICATIONS

- **Mental representation, "standing-in-for", and internal models** *PHILOSOPHICAL PSYCHOLOGY*
  Cao, R., Warren, J.
  2023

- **Multiple realizability and the spirit of functionalism** *SYNTHESE*
  Cao, R.
  2022; 200 (6)

- **Putting representations to use** *SYNTHESE*
  Cao, R.
  2022; 200 (2)

- **Crowding out Memetic Explanation** *PHILOSOPHY OF SCIENCE*
  Cao, R.
  2020; 87 (5): 1160–71

- **New Labels for Old Ideas: Predictive Processing and the Interpretation of Neural Signals** *REVIEW OF PHILOSOPHY AND PSYCHOLOGY*
  Cao, R.
  2020

- **Modest and immodest neural codes: Can there be modest codes?** *The Behavioral and brain sciences*
  Cao, R. n., Rathkopf, C. n.
  2019; 42: e221

- **COMPUTATIONAL EXPLANATIONS AND NEURAL CODING** *ROUTLEDGE HANDBOOK OF THE COMPUTATIONAL MIND*
  Cao, R., Sprevak, M., Colombo, M.
  2019: 283–96

- **Content in Simple Signalling Systems.** *The British journal for the philosophy of science*
  Shea, N., Godfrey-Smith, P., Cao, R.
  2018; 69 (4): 1009–35

- **Signaling in the Brain: In Search of Functional Units**
  Cao, R.
  UNIV CHICAGO PRESS.2014: 891–901

- **A teleosemantic approach to information in the brain** *BIOLOGY & PHILOSOPHY*
  Cao, R.
  2012; 27 (1): 49–71

- **The hemo-neural hypothesis: On the role of blood flow in information processing** *JOURNAL OF NEUROPHYSIOLOGY*
  Moore, C. I., Cao, R.
  2008; 99 (5): 2035–47