

"RATIONAL USE OF COGNITIVE RESOURCES IN HUMANS AND MACHINES"

13TH ANNUAL PERCEPTUAL & COGNITIVE SCIENCE FORUM



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BIO

Dr. Thomas L. Griffiths is the Professor of Information Technology, Consciousness and Culture at Princeton University's Psychology Department. He directs the Princeton University Computational Cognitive Science Lab and his research focuses on identifying the nature of underlying computational problems and examining whether we can explain aspects of human behavior as the result of approximating optimal solutions to those problems.

ABSTRACT

Recent research in artificial intelligence has tended to focus on building systems that solve specific problems, relying on an exponentially increasing amount of data and computation. By contrast, human intelligence is characterized by being able to solve a wide range of problems, making the most of limited data and fixed computational resources. This raises an interesting question: how do people intelligently decide how to allocate those resources? I will outline an answer to this question based on the framework of "resource rationality", which provides a way to characterize rational behavior for agents with limited resources. I will show how this approach can be used to understand aspects of human decision-making and planning and present recent work exploring the potential of this approach in the context of artificial intelligence.

Tuesday, May 4th, 2021 via Zoom EST

Lecture: 11:00AM via Zoom EST

Poster Session: 12:30PM via Zoom EST

Zoom Preregistration: tinyurl.com/ycke3erc