

AAKRITI KUMAR

(+1) 949-372-8021 ♦ aakritk@uci.edu ♦ aakritikumar.com

EDUCATION

- PhD in Cognitive Science** *2018 - 2023 (expected)*
University of California, Irvine
Advisor: Mark Steyvers
- MS in Statistics** *2018 - 2022 (expected)*
University of California, Irvine
- BTech in Metallurgical and Materials Engineering** *2011 - 2015*
Indian Institute of Technology, Madras

RESEARCH EXPERIENCE

Graduate Researcher, UC Irvine *Sept'18 - Present*
Human-Computer Interaction

- Developed a cognitive model of humans' advice seeking behavior when working with AI. Compared simulated behavior to data from a human subject experiment
- Designed and executed a human subject experiment using Google's Natural Questions database. Compared human performance to machine predictions
- [Reviewed](#) literature on trust between humans and machines

Learning

- Analysed large-scale data from the [Lumosity](#) platform to characterise learning and forgetting behavior across individuals and cognitive tasks over time

Cognitive Control

- Developed Bayesian hierarchical models to separate trial noise from other covariation in low signal, high-noise inhibition task data

Research Collaboration with Pradeep Shenoy, Google Research - India *Nov'20 - Present*
Cognitive Control & Meta-Learning

- Proposed and evaluated recurrent neural network models to learn individual specific parameters in cognitive control task data

PUBLICATIONS & PRESENTATIONS

- **Aakriti Kumar**, Trisha Patel, Aaron Benjamin, Mark Steyvers (2021). Explaining Algorithm Aversion with Metacognitive Bandits
Workshop on Human-AI Collaboration in Sequential Decision-Making, ICML 2021 Cognitive Science 2021 [[paper](#)]
- **Aakriti Kumar**, Trisha Patel, Aaron Benjamin, Mark Steyvers (2021). Metacognitive Bandits: When Do Humans Seek AI Assistance?
Social Intelligence in Humans and Robots Workshop, ICRA 2021
- **Aakriti Kumar**, Soumya Chatterjee, Pradeep Shenoy (2021). Meta-learning of Dynamic Policy Adjustments in Inhibitory Control Tasks [In submission]
- Jeffrey N. Rouder, **Aakriti Kumar**, Julia M. Haaf (2019). Why Most Studies of Individual Differences With Inhibition Tasks Are Bound To Fail [[preprint](#)]

AWARDS AND FELLOWSHIPS

- [Irvine Initiative in AI, Law, and Society Fellowship 2021](#) (Total Award: \$22,000)
- Graduate Dean's Recruitment Fellowship 2018, UCI (Total Award: \$5000)
- Recruitment Fellowship Award, 2018, Department of Cognitive Science, UCI (Total Award: \$5000)

TEACHING EXPERIENCE

- Teaching Assistant: Probability and Statistics in Psychology I, II, III (2019), Introduction to Psychology (Fall 2018), UC Irvine

PROFESSIONAL EXPERIENCE

Research Associate, IIT Madras *Mar'17 - May'18*

- Modeled supply chain dishonesty arising due to information asymmetry in the system
- Analysed data for consultancy projects involving fraud detection

Associate Program Manager, Ola cabs *Jun'15 - Aug'16*
Corporate Strategy & Process Excellence

- Ola Airport Pickup (Bangalore, Mumbai) : Designed a process for smooth passenger and driver movement as part of a 4 membered team. Worked with the product team to add driver side demand based alert features on the app
- Ola Store - City Manager(Chennai) - Led a team of 40 employees to launch operations of hyper-local delivery services arm

MEMBERSHIPS AND SERVICE

- Department Colloquium Coordination Committee Member *2021 - 2022*
- Cognitive Science Society Student Member
- Psychonomic Society Student Member
- Contributed to [Advancing the Understanding of Attentional Control](#), Psychonomics 2018