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 *2018-2021 (expected)*
University of California, Irvine

BTech in Metallurgical and Materials Engineering *2011 - 2015*
Minor: Operations Research
Indian Institute of Technology, Madras

RESEARCH

Human Decisions with Machine Assistance Advisor: Mark Steyvers, Padhraic Smyth
Graduate Student Researcher, University of California, Irvine *May'19-Present*

· Investigating strategies to counter cognitive biases such as algorithm aversion and automation bias in human-machine teams
· Designing a web-based experiment using Google's Natural Questions database
· Developing Bayesian cognitive models of trust in human-machine teams

Learning & Retention in Large-scale Cognitive Training Datasets Advisor: Mark Steyvers
Graduate Student, University of California, Irvine *Jan'19-Present*

· Leveraging large-scale data from Lumosity games to analyze the learning trajectories across individuals and cognitive tasks over time
· Jointly modelling the effects of practice, long and short delays on player performance

Individual Differences in Cognitive Control Advisor: Jeffrey N. Rouder
Graduate Student, University of California, Irvine *Sept'18-Dec'19*

· Investigating whether inhibition or cognitive control is a domain-general, unified process that mediates several different actions, tasks, or, alternatively, there is no such unified process
· Developed Bayesian hierarchical models that account for variation across trials, variation across individuals, and covariation across individuals and tasks
· **Preprint:** Rouder, J., Kumar, A., & Haaf, J. M. Why Most Studies of Individual Differences With Inhibition Tasks Are Bound To Fail

TEACHING EXPERIENCE

· Teaching Assistant: Probability and Statistics in Psychology I, II, III (Fall 2019, Winter 2020, Spring 2020), UC Irvine
· Teaching Assistant: Introduction to Psychology (Fall 2018), UC Irvine

RELEVANT SKILLS AND COURSEWORK

· Python, PyTorch, R, JavaScript, HTML, CSS, Git

- Coursework: Bayesian Statistical Analysis, Bayesian Cognitive Modelling, Social Data Science, Statistical Computing Methods, Intermediate Probability and Statistical Theory

PROFESSIONAL EXPERIENCE

Research Associate, Indian Institute of Technology, Madras — Chennai, India
Advisors: Dr. R. R. Marathe, Dr. N. Sudarsanam — *Mar'17 - May'18*

- Conducted research in supply chain management and prospect theory
- Worked on data science projects in supply chain management

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

- Ola Airport Pickup Process (Bangalore, Mumbai) : Designed a process for smooth passenger and driver movement as part of a 4 member team. Built computer simulations to elucidate requirements of drivers based on flight timings and booking history. Worked with the product team to design driver side demand based alert features on the app
- City Revamp Operations (Bangalore, Mumbai): Identified gaps in driver onboarding process. Reduced turnaround time of process by 30%
- Ola Store - City Manager(Chennai): Led a team of 40 to launch operations of hyperlocal delivery services arm

Vocational Trainee, Tata Steel Ltd. — Bangalore, India
Primary Steel Making Unit — *May'13 - Jul'13*

- Analysed the effect of addition of sintered dolomite on slag chemistry and its effect on ladle life

Teacher & Mentor, PACE Pvt. Ltd. — Mumbai, India
Training Center — *May'12 - Jul'12*

- Taught Mathematics and Physics to 50 high school students and mentored 10 girl students preparing for careers in engineering

AWARDS

- Awarded the Graduate Deans Recruitment Fellowship 2018, UCI (Total Award: $10,000)

- Placed in the top 0.5% in IIT-JEE, 2011 with an All India Rank of 2650

- Ranked 62 (year 2008) and 132 (year 2007) in the All India Maths Talent Search Examination conducted by Indian Institute for Studies in Mathematics

MEMBERSHIPS AND SERVICE

- Cognitive Science Society Student Member

- Psychonomic Society Student Member

- Contributed to the Attentional control hackathon: 'Does an attentional control construct exist and, if so, how can we reliably measure it?' held at Psychonomics'18
  Manuscript: Advancing the Understanding of Attentional Control