

# Yash Pote

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## EMPLOYMENT

Postdoc    School of Computing, National University of Singapore, 2025-  
(Mentor: Jonathan Scarlett)

## EDUCATION

Ph.D.       School of Computing, National University of Singapore, 2019-25  
(Advisor: Kuldeep S. Meel)

B.Tech.     Computer Science and Engineering, IIT-Guwahati, 2014-18

## RESEARCH INTEREST

I'm broadly interested in the theory and practice of probabilistic formal methods. Most of my work is on developing techniques in distribution testing with the aim of faster verification tools for real-world distributions, such as samplers, generative models, and bandits. More generally, I am interested in the use of formal methods (like combinatorial solving) in machine learning.

## PUBLICATIONS

Ⓘ indicates random author ordering

### Distribution Testing

- 2025       [A Distribution Testing Approach to Clustering Distributions](#)  
Gunjan Kumar, [Yash Pote](#), Jonathan Scarlett
- 2025       [Instance Dependent Testing of Samplers using Interval Conditioning](#), *AAAI*.  
(Code).  
Rishiraj Bhattacharyya, Sourav Chakraborty, [Yash Pote](#), Uddalok Sarkar and Sayantan Sen
- 2025       [Zero-Shot Attribution for Large Language Models: A Distribution Testing Approach](#),  
*Under Submission*.  
Clement L. Canonne, [Yash Pote](#), and Uddalok Sarkar
- 2025       [Learning Probabilistic Temporal Logic Specifications for Stochastic Systems](#), *IJCAI*.  
(Code).  
Rajarshi Roy, [Yash Pote](#), David Parker and Marta Kwiatkowska  
**Invited to the [Workshop on User-Aligned Assessment of Adaptive AI Systems](#)**
- 2025       [Distance Estimation for High-Dimensional Discrete Distributions](#), *AISTATS*.  
Gunjan Kumar Ⓘ Kuldeep S. Meel Ⓘ [Yash Pote](#).

- 2024     [Testing Self-Reducible Samplers](#), *AAAI*.  
Rishiraj Bhattacharya, Sourav Chakraborty, [Yash Pote](#), Uddalok Sarkar, and Sayantan Sen.
- 2022     [On Scalable Testing of Samplers](#), *NeurIPS* ([Code](#)).  
[Yash Pote](#) (✉) Kuldeep S. Meel
- 2021     [Testing Probabilistic Circuits](#), *NeurIPS* ([Code](#)).  
[Yash Pote](#) (✉) Kuldeep S. Meel
- 2020     [On Testing of Samplers](#), *NeurIPS*. ([Code](#)).  
Kuldeep S. Meel (✉) [Yash Pote](#) (✉) Sourav Chakraborty

### Combinatorial Solvers

- 2025     [Towards Real-Time Approximate Counting](#), *AAAI*.  
[Yash Pote](#) (✉) Kuldeep S. Meel, (✉) Jiong Yang  
**Selected for oral presentation** (4.6% of submitted papers)
- 2021     [Partition Function Estimation: A Quantitative Study](#), *IJCAI* (*Survey*).  
([Slides](#), [Data](#))  
Durgesh Agrawal, [Yash Pote](#), and Kuldeep S. Meel
- 2019     [Phase Transition Behavior of Cardinality and XOR Constraints](#), *IJCAI*.  
([Slides](#), [Code](#)).  
[Yash Pote](#), Saurabh Joshi, and Kuldeep S. Meel

### DNA Data Storage

- 2023     [Efficiently Supporting Hierarchy and Data Updates in DNA Storage](#), *MICRO*.  
Puru Sharma, Cheng-Kai Lim, Dehui Lin, [Yash Pote](#), and Djordje Jevdjic.
- 2022     [Managing Reliability Bias in DNA Storage](#), *ISCA*.  
Dehui Lin, Yasamin Tabatabaee, [Yash Pote](#), Djordje Jevdjic

## TEACHING EXPERIENCE

### National University of Singapore

- CS 4244   Knowledge Representation and Reasoning (2019, 20, 23)  
Teaching Assistant
- CS 5469   Fundamentals of Logic in Computer Science (2019)  
Teaching Assistant
- CS 4218   Software Testing (2021)  
Lab Tutor

## PROFESSIONAL EXPERIENCE

- 2022     Amazon AWS, Applied Science Intern in the Automated Reasoning Group  
Cupertino, California, USA;
- 2017     Goldman Sachs, Summer Intern in the Global Securities Team  
Bangalore, India;

## SERVICE

### Conference Reviewer

*AISTATS* 2024,25

*CAV* 2023

*ICLR* 2023

*ICML* 2021, 22, 23, 24

*NeurIPS* 2021, 23, 24, 25

*PODS* 2024

## SELECTED INVITED TALKS

Towards Practical Distribution Testing ([Video](#))([Slides](#))

2024 A&C Seminar, University of Waterloo.

2024 Verification Seminar, Oxford University.

2024 [Workshop on Local Algorithms\(WOLA\)](#), Simons Institute, Berkeley

2023 SACT talk, University of Sydney.

## EXTENDED RESEARCH VISIT

2024 WOLA at the [Sublinear Algorithms](#) program, [Simon's Institute for the Theory of Computing](#).

2024 Hosted by [Prof. Marta Z. Kwiatkowska](#) at the University of Oxford

2023 Hosted by [Clément L. Canonne](#) at the School of Computer Science at The University of Sydney.

2022 Participant at the [SAT](#) program at the [Simon's Institute for the Theory of Computing](#).

## MISC.

2021 Cofounder of the Graduate Students Association of Computing (Coordinator from 2021-2023)

Updated December 2025