# Sai Srivatsa Ravindranath

Contact Harvard University http://saisrivatsa.com/ Information 5.428, Science and Engineering Campus, Allston, MA saisr@g.harvard.edu

Interests Economics and Computation (Market Design, Economic Theory, Algorithmic Economics)

Machine Learning (Deep Learning, Differentiable Programming)

Harvard University **EDUCATION** (July 2020 - Present)

Ph.D candidate in Computer Science

Advisor: Prof. David Parkes

Indian Institute of Technology, Kharagpur

(2012 - 2016)B. Tech (with Honors) in EE, Minor in CS

Previous Harvard University EMPLOYMENT Fellow of Computer Science

Microsoft Research, India

Research Fellow in Machine Learning and Optimization Group

Publications  $\alpha$  denotes alphabetical ordering of authors

• Preprints

Data Market Design through Deep Learning

SS. Ravindranath, Y. Jiang, DC. Parkes

Deep Learning for Two-Sided Matching

SS. Ravindranath, Z. Feng, S. Li, J. Ma, SD. Kominers, DC. Parkes

Sixth International Workshop on Matching Under Preferences (MATCH-UP 2022)

ArXiv: https://arxiv.org/pdf/2107.03427.pdf

• Conference Papers

From Predictions to Decisions: Using Lookahead Regularization

N. Rosenfeld, S. Hilgard, SS. Ravindranath, DC. Parkes

Thirty-Fourth Conference on Neural Information Processing Systems (NeurIPS 2020)

ArXiv: https://arxiv.org/pdf/2006.11638.pdf

Optimal Auctions through Deep Learning $^{\alpha}$ 

P. Dutting, Z. Feng, H. Narasimhan, DC. Parkes, SS. Ravindranath.

Thirty-Sixth International Conference on Machine Learning (ICML 2019)

ArXiv: https://arxiv.org/pdf/1706.03459.pdf

Salient Object Detection via Objectness Measure

SS. Ravindranath, RV. Babu

Twenty-Second International Conference on Image Processing (ICIP 2015)

ArXiv: https://arxiv.org/pdf/1506.07363.pdf

• Journal Articles

Optimal Auctions through Deep Learning $^{\alpha}$ 

P. Dutting, Z. Feng, H. Narasimhan, DC. Parkes, SS. Ravindranath.

Communications of the ACM, Volume 64 (8), August 2021

DOI: https://dl.acm.org/doi/10.1145/3470442

• Book Chapters

Machine Learning for Matching Markets $^{\alpha}$ 

Z. Feng, DC. Parkes, SS. Ravindranath.

In F. Echenique N. Immorlica and V. Vazirani, editors

Online matching theory and market design. Cambridge University Press, 2022.

Machine Learning for Optimal Economic Design $^{\alpha}$ 

P. Dutting, Z. Feng, N. Golowich, H. Narasimhan, DC. Parkes, SS. Ravindranath.

In JF Laslier, H. Moulin, MR. Sanver, WS. Zwicker, editors, *The Future of Economic Design*. Springer, 2019

• Workshop Papers

### Learning Objective functions for Improved Image retrieval

SS. Ravindranath, M. Gygli, LV. Gool MediaEval Workshops, 2015.

### SCHOLARSHIPS, ACHIEVEMENTS

# Inspire Fellowship for Higher Education

Program by Dept. of Science and Technology, Govt. of India

# Kishore Vaigyanik Protsahan Yojna Fellowship (KVPY)

Awarded to top 250 students in India by Dept. of Science and Technology, Govt. of India

### Certificate of Merit in:

- Indian National Mathematics Olympiad (INMO)
- National Standard Examinations in Chemistry (NSEC).
- National Standard Examinations in Physics (NSEP).

# National Talent Search Scholarship (NTSE)

Awarded to top 1000 high school students in India by NCERT

#### Teaching

### CS 136: Economics and Computation (Teaching Fellow)

Harvard University, Fall 2021

#### INVITED TALKS

### Deep Learning for Two-Sided Matching

- Workshop on Matching Under Preferences (MATCH-UP 2022)
- Deep Learning and Mechanism Design (INFORMS 2021)

#### Service Reviewer

NeuRIPS 2023, ICLR 2023, NeurIPS 2022, ICLR 2022 Gamification and Multiagent Solutions Workshop, NeurIPS 2021