

# Sai Srivatsa Ravindranath

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CONTACT INFORMATION	Harvard University 5.428, Science and Engineering Campus, Allston, MA	<a href="http://saisrivatsa.com/saisr@g.harvard.edu">http://saisrivatsa.com/ saisr@g.harvard.edu</a>
INTERESTS	<b>Machine Learning</b> Deep Learning, Differentiable Programming <b>Economics and Computation</b> Multi-agent systems, Market Design, Game Theory, Algorithmic Economics	
EDUCATION	<b>Harvard University</b> Ph.D candidate in Computer Science Advisor: Prof. David Parkes <b>Indian Institute of Technology, Kharagpur</b> B. Tech (with Honors) in EE, Minor in CS	(July 2020 - Present)    (2012 - 2016)
WORK EXPERIENCE	<b>Google Research</b> (Ongoing) Sequential Auctions through Deep Reinforcement Learning <i>Student Researcher</i> , Market Algorithms Team <b>Microsoft Research</b> Large-scale Multi-label learning and Recommendation Systems <i>Research Fellow</i> , Machine Learning and Optimization Group	
JOURNAL PUBLICATIONS	<sup>α</sup> <i>denotes alphabetical ordering of authors</i> <b>Optimal Auctions through Deep Learning: Advances in Differential Economics<sup>α</sup></b> P. Dutting, Z. Feng, H. Narasimhan, DC. Parkes, <u>SS. Ravindranath</u> . <ul style="list-style-type: none"><li>Journal of the ACM (JACM), September 2023 DOI: <a href="https://dl.acm.org/doi/10.1145/3630749">https://dl.acm.org/doi/10.1145/3630749</a></li><li>Communications of the ACM, Volume 64 (8), August 2021 DOI: <a href="https://dl.acm.org/doi/10.1145/3470442">https://dl.acm.org/doi/10.1145/3470442</a></li></ul>	
CONFERENCE PUBLICATIONS	<b>Deep Learning for Two-Sided Matching</b> <u>SS. Ravindranath</u> , Z. Feng, S. Li, J. Ma, SD. Kominers, DC. Parkes <i>Under submission</i> ArXiv: <a href="https://arxiv.org/pdf/2107.03427.pdf">https://arxiv.org/pdf/2107.03427.pdf</a> <b>Data Market Design through Deep Learning</b> <u>SS. Ravindranath*</u> , Y. Jiang*, DC. Parkes Thirty-Seventh Conference on Neural Information Processing Systems (NeurIPS 2023) ArXiv: <a href="https://arxiv.org/pdf/2310.20096.pdf">https://arxiv.org/pdf/2310.20096.pdf</a> <b>From Predictions to Decisions: Using Lookahead Regularization</b> N. Rosenfeld, S. Hilgard, <u>SS. Ravindranath</u> , DC. Parkes Thirty-Fourth Conference on Neural Information Processing Systems (NeurIPS 2020) ArXiv: <a href="https://arxiv.org/pdf/2006.11638.pdf">https://arxiv.org/pdf/2006.11638.pdf</a> <b>Optimal Auctions through Deep Learning<sup>α</sup></b> P. Dutting, Z. Feng, H. Narasimhan, DC. Parkes, <u>SS. Ravindranath</u> . Thirty-Sixth International Conference on Machine Learning (ICML 2019) ArXiv: <a href="https://arxiv.org/pdf/1706.03459.pdf">https://arxiv.org/pdf/1706.03459.pdf</a> <b>Salient Object Detection via Objectness Measure</b> <u>SS. Ravindranath</u> , RV. Babu Twenty-Second International Conference on Image Processing (ICIP 2015) ArXiv: <a href="https://arxiv.org/pdf/1506.07363.pdf">https://arxiv.org/pdf/1506.07363.pdf</a>	

BOOK CHAPTERS	<p><b>Machine Learning for Matching Markets<sup>α</sup></b>  Z. Feng, DC. Parkes, <u>SS. Ravindranath</u>.  In F. Echenique N. Immorlica and V. Vazirani, editors  <i>Online matching theory and market design</i>. Cambridge University Press, 2022.</p> <p><b>Machine Learning for Optimal Economic Design<sup>α</sup></b>  P. Dutting, Z. Feng, N. Golowich, H. Narasimhan, DC. Parkes, <u>SS. Ravindranath</u>.  In JF Laslier, H. Moulin, MR. Sanver, WS. Zwicker, editors,  <i>The Future of Economic Design</i>. Springer, 2019</p>
TECHNICAL WORKSHOPS	<p><b>Deep Learning for Two-Sided Matching</b>  <u>SS. Ravindranath</u>, Z. Feng, S. Li, J. Ma, SD. Kominers, DC. Parkes  Sixth International Workshop on Matching Under Preferences (MATCH-UP 2022)  ArXiv: <a href="https://arxiv.org/pdf/2107.03427.pdf">https://arxiv.org/pdf/2107.03427.pdf</a></p> <p><b>Learning Objective functions for Improved Image retrieval</b>  <u>SS. Ravindranath</u>, M. Gygli, LV. Gool  MediaEval Workshops, 2015.</p>
SCHOLARSHIPS, ACHIEVEMENTS	<p><b>Inspire Fellowship for Higher Education</b>  Program by Dept. of Science and Technology, Govt. of India</p> <p><b>Kishore Vaigyanik Protsahan Yojna Fellowship (KVPY)</b>  Awarded to <u>top 250</u> students in India by Dept. of Science and Technology, Govt. of India</p> <p><b>Certificate of Merit in:</b></p> <ul style="list-style-type: none"> <li>• Indian National Mathematics Olympiad (INMO)</li> <li>• National Standard Examinations in Chemistry (NSEC).</li> <li>• National Standard Examinations in Physics (NSEP).</li> </ul> <p><b>National Talent Search Scholarship (NTSE)</b>  Awarded to <u>top 1000</u> high school students in India by NCERT</p>
TEACHING	<p><b>CS 136: Economics and Computation (Teaching Fellow)</b>  Harvard University, Fall 2021</p>
SERVICE	<p><b>Reviewer</b>  NeuRIPS 2023, ICLR 2023, NeurIPS 2022, ICLR 2022 Gamification and Multiagent Solutions Workshop, NeurIPS 2021</p>