

Harvineet Singh

CONTACT INFORMATION

Ph.D. Student
Center for Data Science
New York University, NY, USA

mobile: +1-7028498182
email: hs3673@nyu.edu
website: <https://harvineet.github.io/>

RESEARCH INTERESTS

Causal Inference, Algorithmic Fairness, Interactive Machine Learning

EDUCATION

Ph.D. in Data Science, CGPA: 4.0/4.0 (Years 2018 - 2020)
Center for Data Science, New York University, NY, US August 2018 - Present

Integrated Master of Technology in Mathematics and Computing, CGPA: 8.7/10
Indian Institute of Technology (IIT) Delhi, India July 2010 - July 2015

Central Board of Secondary Education, Class XII, Marks(%): 92.40
D.A.V. Public School, Kota, Rajasthan 2010

PUBLICATIONS

- Harvineet Singh, and Rumi Chunara.
Sequential Design of Experiments with Unknown Covariates.
Workshop on Real World Experiment Design and Active Learning at ICML 2020. [Link].
- Harvineet Singh, Rina Singh, Vishwali Mhasawade and Rumi Chunara.
Fair Predictors under Distribution Shift.
Workshop on Fair ML for Health at Conference on Neural Information Processing Systems (NeurIPS) 2019. Oral Presentation. [Link].
- Gaurush Hiranandani*, Harvineet Singh*, Prakhar Gupta*, Iftikhar A. Burhanuddin, Zheng Wen and Branislav Kveton.
Cascading Linear Submodular Bandits: Accounting for Position Bias and Diversity in Online Learning to Rank.
Conference on Uncertainty in Artificial Intelligence, (UAI) 2019. Oral Presentation. [Link].
- AadHAVAN M. Nambhi*, Bhanu P. R. Guda*, Aarsh P. Agarwal*, Gaurav Verma, Harvineet Singh and Iftikhar A. Burhanuddin.
Stuck? No Worries!: Task-aware Command Recommendation and Proactive Help for Analysts.
ACM International Conference on User Modeling, Adaptation, and Personalization, (UMAP) 2019. [Link].
- Moumita Sinha, Vishwa Vinay and Harvineet Singh.
Modeling Time to Open of Emails with a Latent State for User Engagement Level.
ACM International Conference on Web Search and Data Mining, (WSDM) 2018. [Link].
- Ritwick Chaudhry*, Harvineet Singh*, Pradeep Dogga, and Shiv Saini.
Modeling Hint-Taking Behavior and Knowledge State of Students with Multi-Task Learning.
International Conference on Educational Data Mining, (EDM) 2018. [Link].
- Sumit Shekhar, Dhruv Singal, Harvineet Singh, Manav Kedia and Akhil Shetty.
Show and Recall: Learning What Makes Videos Memorable.
Workshop on MBCC at IEEE International Conference on Computer Vision (ICCV) 2017. [Link].
- Siddharth Bora, Harvineet Singh, Anirban Sen, Amitabha Bagchi and Parag Singla.
On the role of conductance, geography and topology in predicting hashtag virality.
Springer Journal on Social Network Analysis and Mining (SNAM) 2015. [Link].

*Equal Contribution

| | | |
|-----------------------------|--|--|
| WORK EXPERIENCE | CRCS, Harvard University , United States : Summer Fellowship <i>Robust policy evaluation under plausible distribution shifts</i> Developed a method to evaluate performance of decision policies in unseen test environments. Our approach applies to both adversarial and interventional perturbations to the observed environments. Adobe Research , India : Research Engineer <i>Member of Big Data Experience Lab</i> Devised and prototyped machine learning algorithms for user behavior prediction and recommender systems. Worked with product teams to transfer technologies to Adobe’s digital marketing solutions. Adobe Research , India : Research Internship <i>Predicting abandonment of online shopping carts</i> Proposed an algorithm to predict return of customers after an online shopping session and tested it on large-scale web clickstream datasets. Work productized as a feature in Adobe Experience Cloud. | PI: Dr. Hima Lakkaraju June 2020 - August 2020 July 2015 - August 2018 PI: Dr. Moumita Sinha May 2014 - July 2014 |
| PATENTS | <ul style="list-style-type: none">Sumit Shekhar, Dhruv Singal, Harvineet Singh and Atanu Sinha. ‘Summarizing Video Content based on Memorability of the Video Content’. U.S. Patent No. 10/311,913.Moumita Sinha, Kandarp S. Khandwala, Harvineet Singh and D. P. Tejas. ‘Predicting Unsubscription of Subscribing Users’. U.S. Patent No. 16/192,517.Prakhar Gupta, Iftikhar Ahamath Burhanuddin, Harvineet Singh and Atanu Sinha. ‘Intelligent Analytics Interface’. U.S. Patent No. 10,546,003. | |
| AWARDS AND ACHIEVEMENTS | <ul style="list-style-type: none">Awarded HRD Scholarship by Ministry of Human Resource Development for academic excellence at IIT, 2014.IITD Semester Merit Award for meritorious academic performance (top 7% of batch).All India Rank 813 in IIT-JEE (entrance examination) 2010 among 0.46 million students.Awarded Travel Grant to attend UAI 2019, FairML4H@NeurIPS 2019. | |
| POSITIONS OF RESPONSIBILITY | Internship Mentor, ARISE Program , NYU Tandon <ul style="list-style-type: none">Mentored two high school students in a STEM research exposure program. Internship Project Supervisor , Adobe Research <ul style="list-style-type: none">Ritwick Chaudhry and Pradeep Dogga, <i>Personal assistants for online education</i>Neha Banerjee and Sahil Garg, <i>Optimal send time strategy for email campaigns</i> Teaching Assistant: Taught tutorial classes for 2 introductory mathematics courses at IIT Delhi. Paper Reviewer: NeurIPS 2020, MLIRL 2020, ML4H 2019, RecSys 2017, UAI 2017. | |
| TECHNICAL SKILLS | Programming Languages: (Proficient) Python, R; (Familiar) MATLAB, Java, JavaScript ML Frameworks: PyTorch, Tensorflow, Apache Spark Applications and Tools: Basic Bash Scripting, Git, L ^A T _E X | |
| RELEVANT COURSES | Statistics Probability and Stochastic Processes Inference and Representation Causal Inference Probabilistic Time Series Analysis Multivariate Statistical Methods | Computer Science, Mathematics Fundamentals of Machine Learning Optimization Methods and Applications Analysis and Design of Algorithms Programming Languages Database Management Systems |