

Sanyam Kapoor

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- Education** **New York University**, NY, USA Sep 2017 - May 2019
Master of Science, Computer Science, GPA: 3.95/4
Advisors: *Joan Bruna*
- Masters Thesis Fellowship, Courant Institute, Fall 2018
- IIT Hyderabad**, Hyderabad, India Aug 2012 - May 2016
Bachelor of Technology, Computer Science, GPA: 8.62/10
- TODAI Scholarship, University of Tokyo, Spring 2013
 - Academic Excellence Award, Fall 2012
- Publications**
as of Jul '20
- Kapoor, S.**, Karaletsos, T., and Bui, T. D. Variational Auto-Regressive Gaussian Processes for Continual Learning. In *ICML Workshop on Continual Learning*, 2020. <https://arxiv.org/abs/2006.05468>
- Moskovitz, T., Wang, R., Lan, J., **Kapoor, S.**, Miconi, T., Yosinski, J., and Rawal, A. First-Order Preconditioning via Hypergradient Descent. In *Beyond First Order Methods in ML NeurIPS Workshop*, 2019. <https://arxiv.org/abs/1910.08461>
- Kapoor, S.** Leveraging Communication for Efficient Sampling, 2019. *Masters thesis*. https://cs.nyu.edu/media/publications/kapoor_sanyam.pdf
- *Resnick, C., *Raileanu, R., **Kapoor, S.**, Peysakhovich, A., Cho, K., and Bruna, J. Backplay: “Man muss immer umkehren”. In *AAAI Workshop on Reinforcement Learning in Games*, 2019. <https://arxiv.org/abs/1807.06919>
- Kapoor, S.** Multi-Agent Reinforcement Learning: A Report on Challenges and Approaches, 2018. *Technical report*. <https://arxiv.org/abs/1807.09427>
- Research Experience** **Information-theoretic reinforcement learning** Sep 2019 - Jan 2020
Advisors: *Thang D. Bui, Theofanis Karaletsos, Matthias Poloczek*
- Implemented mutual information measures for model predictive control
- Representation learning for RL** Sep 2019 - Nov 2019
Advisors: *Jeff Clune, Ashley Edwards*
- Built contrastive loss based representations for *Go-Explore*
- Survival Analysis for Time-Dependent Covariates** Oct 2018 - Dec 2018
Advisor: *Rajesh Ranganath*
- Proposed *Deep Markov Models* to model physiology of ICU patients
- Cooperative zero-sum games** Mar 2018 - May 2018
Advisors: *Joan Bruna, Cinjon Resnick*
- Investigated RL agents based on Q-Learning and Curriculum Learning for non-stationary multi-agent systems
- Molecular Dynamics via machine learning** Jan 2018 - May 2018
Advisors: *Rob Fergus, Alexander Rives*
- Implemented Monte-Carlo sampling for exploration of low-energy protein topologies

Industry Experience	<p>Uber AI Labs, <i>Resident</i>, San Francisco, USA Aug 2019 - Jul 2020</p> <ul style="list-style-type: none"> • Accepted to the program with a < 1% acceptance rate • Working on <i>Bayesian</i> reinforcement learning and representation learning <p>Google, <i>Software Engineering Intern</i>, Sunnyvale, USA May 2018 - Aug 2018</p> <ul style="list-style-type: none"> • Implemented end-to-end Natural Language Code Search example on Kubeflow • Designed Apache Beam Pipelines and Neural Networks using TensorFlow • Demo proposal accepted to KubeCon North America 2018 <p>Headout, <i>Software Engineer</i>, Bengaluru, India Dec 2016 - Jul 2017</p> <ul style="list-style-type: none"> • Led internal developer tooling and designed A/B experiments • Reduced developer onboarding from days to 1/2 hour • Slashed application deployment and rollback downtime by 99% <p>StoryXpress, <i>Co-Founder</i>, Hyderabad, India May 2013 - Aug 2016</p> <ul style="list-style-type: none"> • Built the cloud video service for economical ad creation at scale • Designed the in-house video rendering engine using <i>OpenGL</i> • Handled 2000+ videos/month, authored APIs and website for clients like <i>Target</i>
Teaching Experience	<p>Head Grader, <i>Machine Learning</i>, NYU Spring 2019</p> <p>Teaching Assistant, <i>Introduction to Machine Learning</i>, NYU Spring 2019</p> <p>Section Leader, <i>Inference and Representation</i>, NYU Fall 2018</p> <p>Grader, <i>Introduction to Machine Learning</i>, NYU Fall 2018</p> <p>Recitation Leader, <i>Data Structures</i>, NYU Spring 2018</p> <p>Grader, <i>Machine Learning</i>, NYU Spring 2018</p>
Other Honors & Awards	<p>StackOverflow Top Contributor: Reputation 5.4k (top 7% overall as of Jul '20); answers reached ~1.8 million people, 2020</p> <p>NASSCOM Emerge 50: <i>StoryXpress</i> among top startups from 500+ across India for innovation impact, 2015</p> <p>HYSEA Best Software Product, Student Innovation: <i>StoryXpress</i> winner among 100+ startups, 2015</p> <p>Microsoft Build the Shield: First Runner up among 280 teams across India, 2015</p> <p>ACM ICPC Amritapuri Regionals: Finalist among 1500+ teams, 2013</p> <p>Joint Entrance Exam (JEE): Top 0.5% among 0.5 million students across India for undergraduate admissions, 2012</p>
Technical Skills	<p>Languages: Python, Javascript, C, C++, Java</p> <p>Technologies: PyTorch, TensorFlow, Pyro PPL, CUDA, MySQL, React, Docker, Ansible, OpenGL</p>