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| Education | New York University , PhD in Data Science | Sep 2020 - May 2025 |
| | Advisor: <i>Andrew Gordon Wilson</i> | |
| | <ul style="list-style-type: none"> Center for Data Science Fellowship, 2020-2025 | |
| | New York University , MS in Computer Science | Sep 2017 - May 2019 |
| | Advisor: <i>Joan Bruna</i> | |
| | <ul style="list-style-type: none"> Masters Thesis Fellowship, Courant Institute, 2018 | |
| | IIT Hyderabad , B.Tech in Computer Science | Aug 2012 - May 2016 |
| | <ul style="list-style-type: none"> TODAI Scholarship, University of Tokyo, 2013 Academic Excellence Award, 2012 | |
| Industry Experience | NVIDIA , Research Scientist, New York | Jul 2025 - Present |
| | <ul style="list-style-type: none"> Research on reasoning in large language models (LLMs). | |
| | NVIDIA , Applied Research Intern, Santa Clara | Jun 2024 - Aug 2024 |
| | <ul style="list-style-type: none"> Research on in-context learning and large language model robustness. | |
| | Netflix , Research Intern, Los Gatos | Jun 2022 - Aug 2022 |
| | <ul style="list-style-type: none"> Research in probabilistic recommender systems. | |
| | Amazon , Applied Science Intern, Berlin | Jul 2021 - Sep 2021 |
| | <ul style="list-style-type: none"> Research in multi-fidelity Bayesian optimization. | |
| | Uber , AI Resident, San Francisco | Aug 2019 - Jul 2020 |
| <ul style="list-style-type: none"> Less than 1% acceptance rate; research in approximate Bayesian inference. | | |
| Google , Software Engineering Intern, Sunnyvale | May 2018 - Aug 2018 | |
| <ul style="list-style-type: none"> Natural language code search on Kubeflow at KubeCon North America 2018. | | |
| Headout , Software Engineer, Bengaluru | Dec 2016 - Jul 2017 | |
| <ul style="list-style-type: none"> Led internal developer tooling; slashed deployment/rollback downtime by 99%. | | |
| StoryXpress , Co-Founder, Hyderabad | May 2013 - Aug 2016 | |
| <ul style="list-style-type: none"> Designed the in-house OpenGL video engine for creation at scale. | | |
| Publications | L. Deng, H. Xiong, F. Wu, S. Kapoor , S. Ghosh, Z. Shahn, and L. H. Lehman. Uncertainty Quantification for Conditional Treatment Effect Estimation under Dynamic Treatment Regimes. In <i>ML4H Symposium</i> , 2024 | |
| | S. Kapoor* , N. Gruver*, M. Roberts, K. M. Collins, A. Pal, U. Bhatt, A. Weller, S. Dooley, M. Goldblum, and A. G. Wilson. Large Language Models Must Be Taught to Know What They Don't Know. In <i>NeurIPS</i> , 2024 | |
| | S. Qiu*, T. R. Rudner*, S. Kapoor* , and A. G. Wilson. Should We Learn Most Likely Functions or Parameters? In <i>NeurIPS</i> , 2023 | |
| | T. R. Rudner, S. Kapoor , S. Qiu, and A. G. Wilson. Function-Space Regularization in Neural Networks: A Probabilistic Perspective. In <i>ICML</i> , 2023 | |

S. Lotfi*, M. Finzi*, **S. Kapoor***, A. Potapczynski*, M. Goldblum, and A. G. Wilson. PAC-Bayes Compression Bounds So Tight That They Can Explain Generalization. In *NeurIPS*, 2022

R. Shwartz-Ziv*, M. Goldblum*, H. Souri, **S. Kapoor**, C. Zhu, Y. LeCun, and A. G. Wilson. Pre-Train Your Loss: Easy Bayesian Transfer Learning with Informative Priors. In *NeurIPS*, 2022

S. Kapoor*, W. Maddox*, P. Izmailov*, and A. G. Wilson. On Uncertainty, Tempering, and Data Augmentation in Bayesian Classification. In *NeurIPS*, 2022

W. J. Maddox, **S. Kapoor**, and A. G. Wilson. When are Iterative Gaussian Processes Reliably Accurate? In *ICML OPTML Workshop*, 2021

S. Kapoor and Valerio Perrone. A Simple and Fast Baseline for Tuning Large XGBoost Models, 2021. *Technical report*

N. Gruver, **S. Kapoor**, M. Cranmer, and A. G. Wilson. Epistemic Uncertainty in Learning Chaotic Dynamical Systems. In *ICML UDL Workshop*, 2021

S. Kapoor, M. Finzi, A. Wang, and A. G. Wilson. SKing on Simplices: Kernel Interpolation on the Permutohedral Lattice for Scalable Gaussian Processes. In *ICML*, 2021a. (**Oral, Top 3%**)

S. Kapoor, T. Karaletsos, and T. D. Bui. Variational Auto-Regressive Gaussian Processes for Continual Learning. In *ICML*, 2021b

T. Moskovitz, R. Wang, J. Lan, **S. Kapoor**, T. Miconi, J. Yosinski, and A. Rawal. First-Order Preconditioning via Hypergradient Descent. In *NeurIPS OPT Workshop*, 2019

S. Kapoor. Leveraging Communication for Efficient Sampling, 2019. *Masters thesis*

C. Resnick*, R. Raileanu*, **S. Kapoor**, A. Peysakhovich, K. Cho, and J. Bruna. Backplay: “Man muss immer umkehren”. In *AAAI RL in Games Workshop*, 2019

S. Kapoor. Multi-Agent Reinforcement Learning: A Report on Challenges and Approaches, 2018. *Technical report*

Technical Skills

Languages: Python, Node, Javascript, Bash, C, C++, Java
Technologies: PyTorch, JAX, TensorFlow, Pyro PPL, CUDA, MySQL, React, Docker, Ansible, OpenGL

Honors & Awards

StackOverflow Top Contributor: Reputation 6.5k (top 6% overall as of Jul 2025); answers reached ~3.1 million people, 2024

NASSCOM Emerge 50: *StoryXpress* among top startups from 500+ across India for innovation impact, 2015

HYSEA Best Software Product, Student Innovation: *StoryXpress* winner among 100+ startups, 2015

Microsoft Build the Shield: First Runner up among 280 teams across India, 2015

ACM ICPC Amritapuri Regionals: Finalist among 1500+ teams, 2013

Joint Entrance Exam (JEE): Top 0.1% among 0.5 million students across India for undergraduate admissions, 2012

Teaching Experience

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| Section Leader , <i>Optimization and Computational Linear Algebra</i> , NYU | Fall 2023 |
| Teaching Assistant , <i>Introduction to Machine Learning</i> , NYU | Spring 2021 |
| Head Grader , <i>Machine Learning</i> , NYU | Spring 2019 |
| Teaching Assistant , <i>Introduction to Machine Learning</i> , NYU | Spring 2019 |
| Section Leader , <i>Inference and Representation</i> , NYU | Fall 2018 |
| Grader , <i>Introduction to Machine Learning</i> , NYU | Fall 2018 |
| Recitation Leader , <i>Data Structures</i> , NYU | Spring 2018 |
| Grader , <i>Machine Learning</i> , NYU | Spring 2018 |

Outreach & Services

Reviewer: ICML (2021); NeurIPS (2021,2022,2023); BDL (2021); ICLR (2022,2024)

Instructor: CDS Undergraduate Research Program (2021); NYU AI School (2022)