

Keyon Vafa

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| Interests | Machine Learning, Deep Generative Models, Computational Social Science, NLP | |
| Education | Columbia University Ph.D. Computer Science Advisor: David Blei | 2017 - |
| | Columbia University M.S. Computer Science | 2016 - 2018 |
| | Harvard University B.A. Computer Science and Statistics, <i>magna cum laude</i> | 2012 - 2016 |
| Awards and Fellowships | Cheung-Kong Innovation Doctoral Fellowship | 2020 - |
| | Columbia University Nominee for Google PhD Fellowship | 2019 |
| | National Science Foundation, Graduate Research Fellowship | 2016 - 2019 |
| | Columbia University Dean's Fellowship | 2016 - |
| | Elected to Phi Beta Kappa Society | 2016 |
| | Bok Center Certificate of Distinction in Teaching | 2015 |
| | John Harvard Scholar (grade point average in top 5% of class) | 2013 - 2015 |
| Work Experience | Software Engineer Intern, Google Brain | 2018 - 2019 |
| | Research Intern, Facebook Artificial Intelligence Research | 2017 |
| | Data Science Intern (Places Team), Facebook | 2015 |
| | Software Engineer Intern (Data Science Infrastructure), Facebook | 2014 |
| Selected Papers | A. Schein, K. Vafa , D. Sridhar, V. Veitch, J. Moffet, J. Quinn, N. Makiya, D. Blei, Donald Green. A digital field experiment reveals large effects of friend-to-friend texting on voter turnout . <i>The Web Conference (WWW)</i> , to appear. | 2021 |
| | K. Vafa , S. Naidu, D. Blei. Text-based ideal points . <i>Proceedings of ACL</i> . | 2020 |
| | D. Tran, K. Vafa , K. Agrawal, L. Dinh, B. Poole. Discrete flows: Invertible generative models of discrete data . <i>Proceedings of NeurIPS</i> . | 2019 |
| | K. Vafa . Training deep Gaussian processes with sampling . <i>Advances in Approximate Bayesian Inference Workshop at NeurIPS</i> . | 2016 |
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| | K. Vafa , C. Haigh, A. Leung, N. Yonack. Price discrimination in the Princeton Review's online SAT tutoring service . <i>Journal of Technology Science</i> . 2015 | |
| Selected Talks | Test-Based Ideal Points (invited talk), Milstein Program Summer Speaker Series . Cornell Tech. 2020 | |
| | Discrete Flows and Text-Based Ideal Points (guest lecture), Machine Learning with Probabilistic Programming , Columbia University. 2019 | |
| | Text-Based Ideal Points, Text as Data Conference , Stanford University. 2019 | |
| | Text-Based Ideal Points, <i>Caselaw Access Project Research Summit</i> , Harvard Law School. 2019 | |
| Teaching Experience | Department of Computer Science, Columbia University Teaching Assistant, Foundations of Graphical Models (graduate level) Professor: David Blei 2018 | |
| | Department of Computer Science, Harvard University Teaching Fellow, CS 281: Advanced Machine Learning (graduate level) Professor: Finale Doshi-Velez 2015 | |
| | Teaching Fellow, CS 181: Introduction to Machine Learning Professor: Ryan Adams 2015 | |
| Conference Reviewing | International Conference on Machine Learning 2017 - 2021 | |
| | Neural Information Processing Systems 2017 - 2020 | |
| | Advances in Approximate Bayesian Inference 2017 - 2020 | |
| | International Conference on Learning Representations 2017 - 2021 | |
| | Association for Computational Linguistics 2021 | |
| Reviewer Recognition | Top 33% Reviewer for ICML 2020 | |
| | Top 10% Reviewer for NeurIPS 2020 | |
| | ICML Expert Reviewer 2021 | |
| | ICLR Reviewer Award 2021 | |
| Other Experience | GetUsPPE , Data Scientist | |
| | Volunteered as a data scientist for GetUsPPE , an organization that is distributing personal protective equipment during the Covid-19 pandemic. 2020 | |

Press

[Harvard Law Today blog post](#): Text-Based Ideal Points

[ProPublica article](#): Princeton Review Price Discrimination

[Today Show segment](#): Princeton Review Price Discrimination

Languages and Skills

Python (+ PyTorch and TensorFlow), R (+ Stan), SQL, Java, PHP, Go

English (native), French (advanced), Farsi (proficient)

Long distance running (ran 2016 Boston Marathon)