Rahul Kidambi

E-Mail: rkidambi@uw.edu; Homepage: https://rahulkidambi.github.io/
Web Presence: Google Scholar; Github; dblp.

Research Interests

Applications and Foundations of Machine Learning, Deep Learning and Optimization.

Selected Papers

* : alphabetical ordering of authors (as in CS Theory papers).

- Naman Agarwal*, Sham Kakade*, *Rahul Kidambi**, Yin Tat Lee*, Praneeth Netrapalli*, Aaron Sidford*, "Leverage Score Sampling for Faster Accelerated Regression and ERM", In Conference on Algorithmic Learning Theory (**ALT**), 2020.
- Rong Ge*, Sham M. Kakade*, *Rahul Kidambi**, Praneeth Netrapalli*, "The Step Decay Schedule: A Near-Optimal Geometrically Decaying Learning Rate Procedure For Least Squares", To Appear, Advances in Neural Information Processing Systems (**NeurIPS**), 2019.
- Rong Ge*, Prateek Jain*, Sham M. Kakade*, *Rahul Kidambi**, Dheeraj M. Nagaraj*, Praneeth Netrapalli*, "Open Problem: Do Good Algorithms Necessarily Query Bad Points?", Conference on Learning Theory (**COLT**), 2019.
- *Rahul Kidambi*, Praneeth Netrapalli, Prateek Jain, Sham M. Kakade, "On the Insufficiency of existing momentum schemes for Stochastic Optimization", in International Conference on Learning Representations (**ICLR**) 2018. Oral Presentation (23/1002 $\approx$ 2% Acceptance Rate).
- Prateek Jain*, Sham M. Kakade*, *Rahul Kidambi**, Praneeth Netrapalli*, Aaron Sidford*, "Accelerating Stochastic Gradient Descent for Least Squares Regression", in Conference on Learning Theory (**COLT**), 2018.
- Prateek Jain*, Sham M. Kakade*, *Rahul Kidambi**, Praneeth Netrapalli*, Aaron Sidford*, "Parallelizing Stochastic Gradient Descent for Least Squares Regression: mini-batching, averaging, and model misspecification", in Journal of Machine Learning Research (**JMLR**), 2018.
- Jennifer Gillenwater, Rishabh Iyer, Bethany Lusch, *Rahul Kidambi*, Jeff Bilmes, "Submodular Hamming Metrics", in Neural Information Processing Systems (**NeurIPS**), 2015. Spotlight presentation.

Education

- **Doctor of Philosophy** - PhD, ECE, University of Washington, Seattle – 2019.
  Adviser: Prof. Sham M. Kakade (Associate Professor of Computer Science and Statistics).
  Dissertation Title: Stochastic Gradient Descent for Modern Machine Learning: Theory, Algorithms and Applications.
- **Master of Science** - M.S., ECE, University of California, Santa Barbara – 2012.
- **Bachelor of Technology** - B.Tech, ECE, National Institute of Technology, Tiruchirappalli – 2010.
  Smt. Neela Balasubramaniam endowed prize for *best outgoing student* of the ECE department.

Research Experience

- Graduate Student Researcher, University of Washington Seattle - 2015 – 2019.
  Mentor: Prof. Sham M. Kakade.
- Research Intern, Microsoft Research India, Summer 2017.
  Mentor: Dr. Praneeth Netrapalli, Dr. Prateek Jain.
- Research Assistant, Microsoft Research India, Spring 2013-Fall 2014.
  Mentor: Dr. Sundararajan Sellamanickam; Also worked with Dr. S. Sathiya Keerthi.

Service

Served as a referee for ML conference venues (ICML, NeurIPS, COLT, ICLR, AISTATS, ALT, ISIT) and journals (JMLR, Elec. Journal of Statistics, IEEE Trans. Info. Theory). Reviewed applications for UW CSE's PhD program - 2019.