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 ≈ 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 reviewer for top 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.