

Rahul Kidambi

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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.