

Rahul Kidambi

e-mail: rkidambi@uw.edu; homepage: <https://rahulkidambi.github.io/>
[Google Scholar](#); [Github](#); [dblp](#).

Research Interests

Applications and Algorithms for Machine Learning, Deep Learning and Optimization.

Selected Papers

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

- ↗ (*) 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, in Neural Information Processing Systems (**NeurIPS**), 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.
- ↗ *Rahul Kidambi*, Min-Chi Shih, Kenneth Rose, “[Deformable Trellises over Factor Graphs for Robust Microtubule Tracking in Clutter](#)”, in International Symposium on Biomedical Imaging (**ISBI**), 2012.

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 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

Reviewer for conferences (ICML, NeurIPS, COLT, ICLR, ISIT, AISTATS) and journals (JMLR, Elec. Journal of Statistics, IEEE Trans. Info. Theory).