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Miles Lopes* (melopes@ucdavis.edu), **Shusen Wang** and **Michael W Mahoney**. *Error Estimation for Randomized Numerical Linear Algebra via the Bootstrap.*

Randomized Numerical Linear Algebra (RandNLA) is an interdisciplinary research area that exploits randomization as a computational resource to develop improved algorithms for large-scale linear algebra problems. While the motivating applications for RandNLA are in large-scale machine learning and data analysis, most work in RandNLA so far has come from the perspectives of theoretical computer science and numerical linear algebra. This has begun to change, and many of the most exciting current developments in RandNLA have to do with focusing on statistical and optimization considerations. Here, we describe recent results that use the statistical bootstrap method to enhance error estimation in the contexts of large-scale matrix multiplication and least squares. (Received August 02, 2018)