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Stefan Wild*, wild@anl.gov. *Manifold Sampling for Robust Calibration.*

We adapt a manifold sampling algorithm for the composite nonsmooth, nonconvex optimization formulations of model calibration that arise when imposing robustness to outliers present in training data. We demonstrate the approach on objectives based on trimmed loss and highlight the challenges of solving these optimization problems. Initial results demonstrate that the method has favorable scaling properties. Savings in time on large-scale problems arise at the expense of not certifying global optimality in empirical studies, but our method also extends to cases where the loss is computed by a black-box oracle. (Received September 17, 2019)