

**Minimalist G -modeling: Nonparametric MLE methods
for mixture models**

ROGER KOENKER*

*University College London, United Kingdom

Abstract. A new implementation of the Kiefer-Wolfowitz (1956) nonparametric maximum likelihood estimator for mixture models will be described and illustrated with several examples. Two appealing features of the implementation are that it is computable by standard convex optimization methods and that it is free of any tuning parameters. We contrast this approach with Efron's g -modeling based on specifying the logarithm of the mixing density as a natural spline expansion.