Majorizing Least Squares Loss functions

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TBD

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Note: This is a working manuscript which will be expanded/updated frequently. All suggestions for improvement are welcome. All Rmd, tex, html, pdf, R, and C files are in the public domain. Attribution will be appreciated, but is not required. The files can be found at https: //github.com/deleeuw/majorls

1 Introduction

2 Positive Definite Weights

$$\sigma(y) = (x - y)'W(x - y)$$

Wiuth $W \gtrsim 0$. Minimize over $y \in \mathcal{Y}$.

2.1 Scalar Majorization

2.2 Diagonal Majorization

2.3 Examples

2.3.1 Linear Regression

2.3.2 Low-rank Approximation