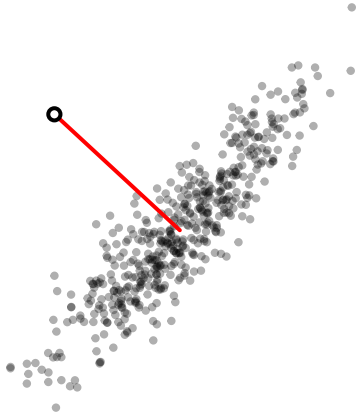


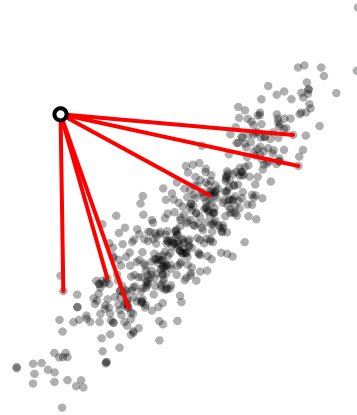
Mahalanobis distance

$$D_M(x_i) = \sqrt{(x_i - \bar{x})^T S^{-1} (x_i - \bar{x})}$$



Harmonic mean distance

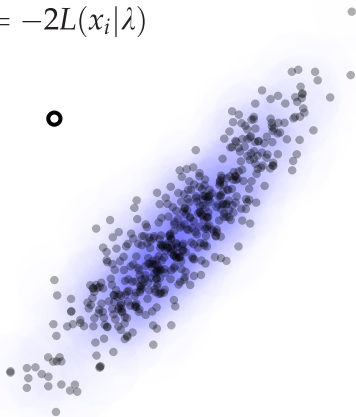
$$D_H(x_i) = N \left[\sum_{j \neq i} [(x_i - x_j)^T S^{-1} (x_i - x_j)]^{-1/2} \right]^{-1}$$



Kernel density deviance

$$L(x_i|\lambda) = \log \left(\frac{1}{N-1} \sum_{j \neq i} G(x_i|x_j, \lambda^2 S) \right)$$

$$D_K(x_i) = -2L(x_i|\lambda)$$



Nearest neighbor distance

$$D_N(x_i) = \min_{j \neq i} \left(\sqrt{(x_i - x_j)^T S^{-1} (x_i - x_j)} \right)$$

