voting kernels

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Table 1: Table continues below

Kernel	Formula
Biweight	For $\lvert d \rvert < m$, kernel weight is $d(1 - \frac{d^2}{m^2})^2$. Otherwise, 0 when $\lvert d \rvert > m$. The value $m = d$ for the k^{th} neighbor.
Rectangular	$Pr(Y = j) = \frac{1}{k} \sum_{i=1}^{k} I(y_i = c)$
Inverse	$Pr(Y = j) = \sum_{i=1}^{k} w(d)(y_i = j)$ where $w(d) = \frac{1}{d_i \sum_{i=1}^{k} (\frac{1}{d_i})}$
Gaussian	

Interpretation

Calculate the proportion of j based on k nearest neighbors. This is the same of simple arithmetic mean.

Calculate the weighted proportion of j based on the inverse distance to k nearest neighbors.