

Classification of the behavior of Voxel-Based Soft Robots using Unsupervised Learning

Francesco Andreuzzi, Luca Filippi

January 1, 2022

1 Coefficients

$$k_{\text{mi}}^i = \left(\frac{x_{\text{mode.interval}}^i}{\max_i x_{\text{mode.interval}}^i} \right)^{-1} = \frac{\max_i x_{\text{mode.interval}}^i}{x_{\text{mode.interval}}^i} \quad (1)$$

$$k_{\text{p}}(d) = (x_{\text{purity}}^i)^d \quad (2)$$

$$k_{\text{nf}}(d) = \frac{x_{\text{num.footprints}}^i}{\max_i x_{\text{num.footprints}}^i} \quad (3)$$

$$k_{\text{nuf}}(d) = \frac{x_{\text{num.footprints}}^i}{x_{\text{num.unique.footprints}}^i} \quad (4)$$