

$$\text{bin_loc}(x) = \begin{cases} \frac{1}{n_{bins}} \left\lfloor \frac{x - \min(x)}{\max(x) - \min(x)} \times n_{bins} \right\rfloor \times \{\max(x) - \min(x)\} + \min(x), & \text{if } x < \max(x) \\ \frac{n_{bins} - 1}{n_{bins}} \times \{\max(x) - \min(x)\} + \min(x), & \text{if } x = \max(x) \end{cases}$$