

Imperfection Factor Explained

1 Introduction

The “Imperfection Factor” of a distribution is a measurement I invented to measure how far it is from being perfect.

Near 0 is near perfect, and near 1.9 is near worst.

The formula is:

$$\sum_{i=0}^9 \left| \frac{0.1 * i - \sum_{d=1}^{10}}{i} \right|^2$$

This takes the total of differences between the perfect distribution and the actual distribution for all subsections of the distribution. It also scales it such that smaller subsections are counted more heavily than larger subsections.

This “Imperfection Factor” is not a formal definition, but rather something I invented to fit my idea for a hashing function.