

Supervised Learning

1 Why

We think there is a functional relationship between elements of one set and another set.

2 Definition

Let \mathcal{U} be a set and \mathcal{V} be a set. We have a data set (u^1, \ldots, u^n) in \mathcal{U} and a data set in (v^1, \ldots, v^n) in \mathcal{V} . We view u^i as functionally related to v^i . We view these as pairs (u^i, v^i) in $\mathcal{U} \times \mathcal{V}$ and speak of one data set $((u^1, v^1), \ldots, (u^n, v^n))$ in $\mathcal{U} \times \mathcal{V}$.