Data Fitting

1 Why

We think there is a functional relationship between vectors in n dimensional space and vectors in m dimensional space.

2 Definition

We think a vector in d dimensional space and a vector in m dimensional space are approximately related by a function. We call the argument to the function the **independent variable** and we call the result of the function the **dependent variable**. Very often $m = 1$ so the dependent variable is a scalar.

A **predictor** is a function from the d dimensional space to the m dimensional space.