# **Batch Normalization**

## **Normalizing inputs**

How do you normalize the data?

1. First, let’s have another brief look at the Deep Learning timeline
   1. In this chapter, we will be looking at Batch Normalization and Dropout, which in some sense come under the topic of **“Better Regularization”**
2. Before we talk about Batch Normalization, let us first recap on how we normalize/standardize inputs. **The terms normalization & standardization are used interchangeably**
   1. We normalize the data using the following formula:
      1. for each feature of each training sample.
      2. Where mean:
      3. And Variance/Standard deviation: