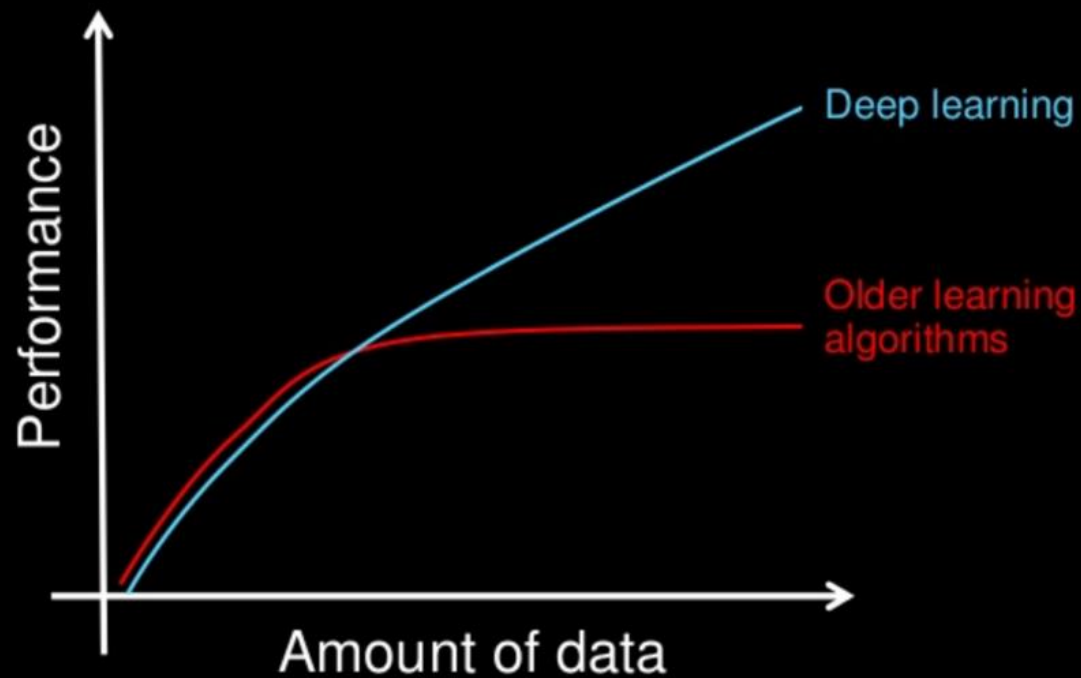## Deep Learning is Hierarchical Feature Learning

In addition to scalability, another often cited benefit of deep learning models is their ability to perform automatic feature extraction from raw data, also called feature learning.

Deep Learning is a new area of Machine Learning research, which has been introduced with the objective of moving Machine Learning closer to one of its original goals Artificial Intelligence.

Deep Learning
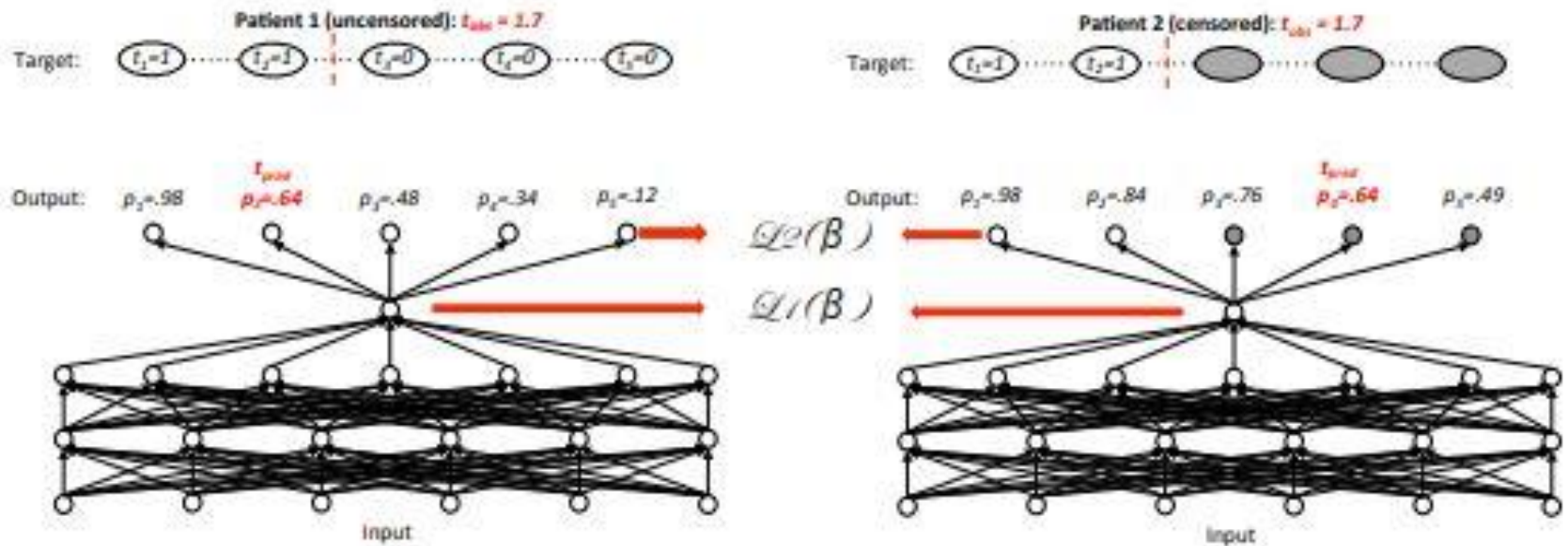
Deep Learning Model

Figure 1: Our deep learning model. (Left) The case of an uncensored patient. (Right) The case of a censored patient. The greyed out output units in the censored case correspond to censored units for which no loss is computed and no error back-propagation is done. Two losses are computed: a ranking loss on the bottleneck scalar unit and a cumulative time prediction on the top output units.