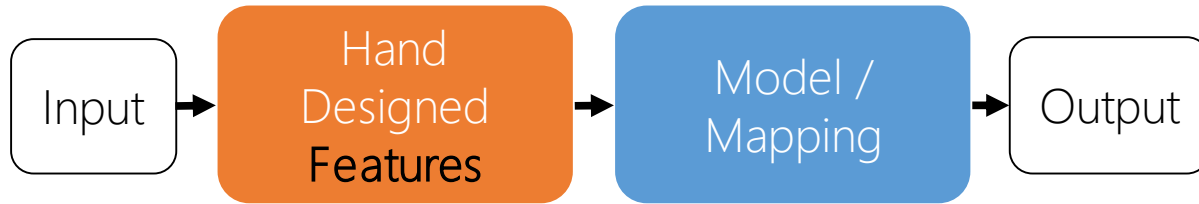


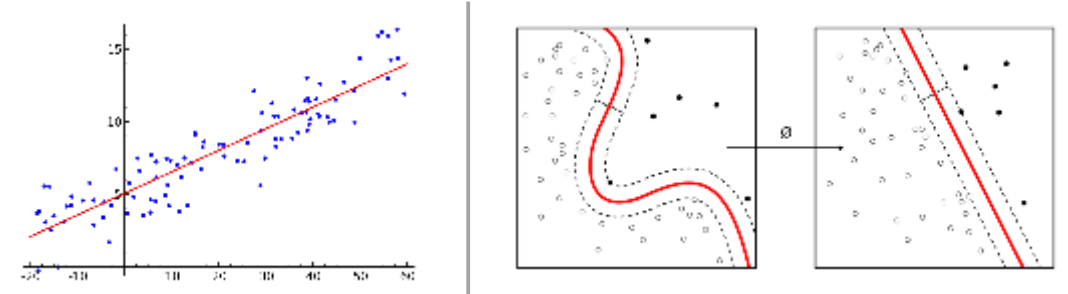
Deep Neural Networks

Difference in Workflow

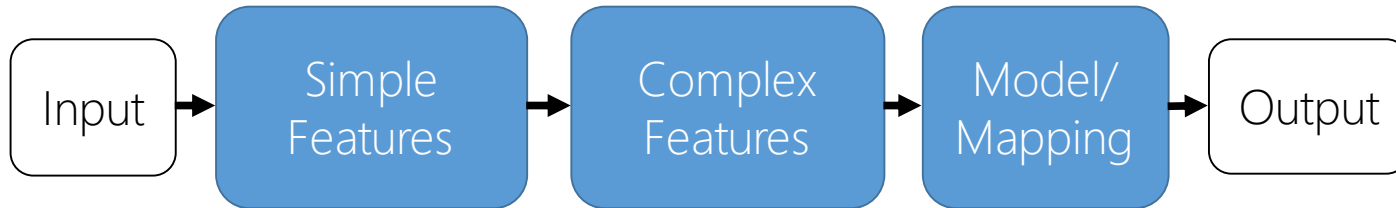
Classic Machine Learning [1990 : now]



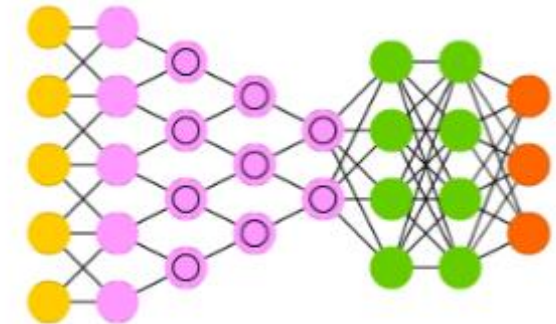
Examples [Regression and SVMs]



Deep/End-to-End Learning [2012 : now]

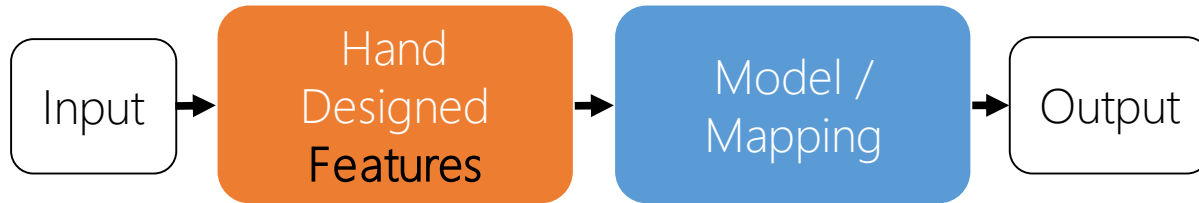


Example [Conv Net]

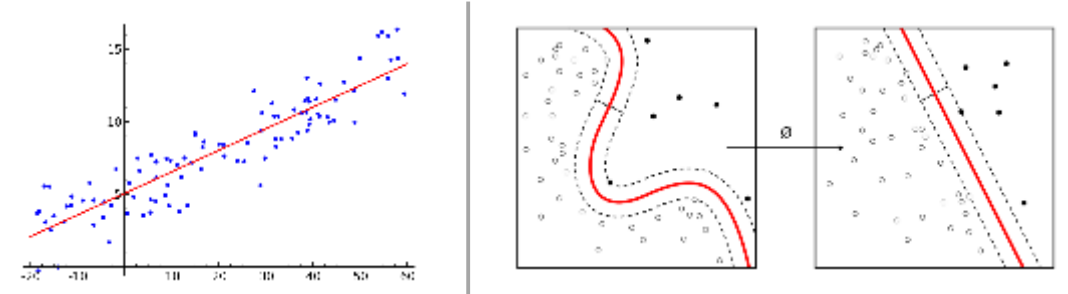


Difference in Workflow

Classic Machine Learning [1990 : now]



Examples [Regression and SVMs]



Challenge: How would you give instructions to differentiate the handwritten digit on the right from other digits to:

A two-year-old child learning numbers OR
A computer using any programming language (including pseudocode)

Answer in discussion section– 3 minutes



FIRST HANDS-ON SECTION

Train a Human Learner

Train a Machine Learner

Biological Inspiration

