**Deep Learning with Python**

## Part 1 : Fundamentals of Deep Learning

A diagram of a machine learning

Description automatically generated

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* A machine learning system is trained rather than explicitly programmed. Its presented with many examples relevant to a task, and it finds statistical structure in these examples that eventually allows the system to come up with rules for automating the task.
* Machine learning discovers rules to execute a data-processing task.
* For machine learning we need three things:
* Input data points
* Examples of the expected output
* A way to measure whether the algorithm is doing a good job or not
* Machine learning is , technically searching for useful representations of some input data, within a predefined space of possibilities, using guidance from feedback signal.