

(i) Reinforment learning,
Rewards from sequence of actions
doesn't use labeled or unlabled data
in the traditional sense
In RL an agent learns via interaction
with an environment.

is your cat is an agent that is exposed to the environment. The biggest characteristic of RC is that there is no substition, only a real no. Or reward signal

(B) In Maching learning, Generalization is a definition to Lemonstoats how well is a strained model to classify or forecast unseen data. Training a squeralized machine learning model means, in general, it pucks for all subset of inseen data.

Jeneralization performale is the fundamental problem in inductive learning.

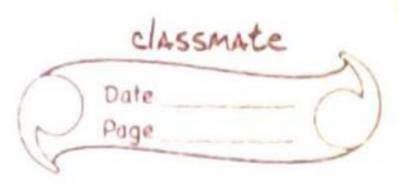
Because,

Given a Mollection of examples

(n(i) f(n)(i)); i=1,2,:... of a function

f(n), retween a function h(n) that
approximates f(n).

from a Conceptual Boint of view, it is not easy to tell wheather any



	fasticular h(n) is a good approximation of function, A good approximation will generalize well. It will fredict novel patterns correctly.
	Of function. A good albroximation
	generalize well Tt will balist wall
	hattens Correct.
	part cores a cooleany.
27	ρ_{0}
	let us assume given set of random example (n, y) from (n, y) to (nn, yn) draw from a probability distribution P over R.
	example (n, y) From (n, y) to (nn, yn)
	draw from a probability distribution P
	Now,
	True Risk fun w.r.t Pas R
7	
	E[L(y, f(n, w))] = [L(y, f(n, w))] P(n, y) Andy = R(w)
	×*y 7
	R(w)= E[(nw-y)2]-0)
	Therefore a learning machine lan at beast of best guarantee that
	beast a best anarantee that
	the estimales opvalues g fit the
	toue values y over training data.
	As dataset is the only source of
	information the sisk function given by
	1) must be appoint approximat the
	empisical risk Afun (w)'-
	Remb(W) = 1 & L(g(i), f(n(i), w)).
	$N(\bar{c}=1)$