

IT-567: Reinforcement Learning

Evaluation components:-

In-Sem-1 22% (2 hrs)

In-Sem-2 23% (2 hrs)

End-Sem 25% (3 hrs)

Laboratory:- 30%

(3-0-2-4)

} slightly lengthy.

→ RL - An introduction
2nd edition

R.S. Sutton & A.G. Barto

available online.

→ online courses

- Indian - IITM. Prof. B. Ravindran (NPTEL)
- US - Stanford Univ.

→ Mathematical Rigor - We avoid proofs. But if the audience show interest, we will do some of them.

Reinforce :- to make something stronger

Reinforcement :- making "stronger" or extra people who are sent to make an army, navy etc. stronger

→ enhancement of behavior

Cambridge :- It is also a way of influencing behavior through rewards & punishments.

positive RF / negative RF.

psychology

The term "reinforcement" may refer to anything that ↑ the prob. that a response will occur.

Positive RF:- giving a gift/reward for doing some action
negative RF:- something that can be removed to ↑ the response

ex- paying 90% loan amount, yet 10% is waived.

→ RL:- Computational approach to learning from interaction.

→ focussed on 'goal-directed' learning from interaction