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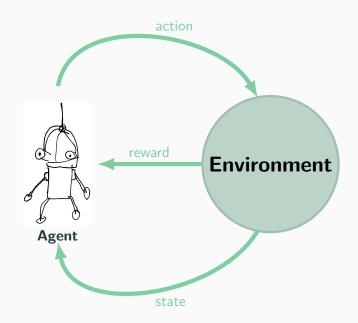
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IME-USP: Institute of Mathematics and Statistics, University of São Paulo

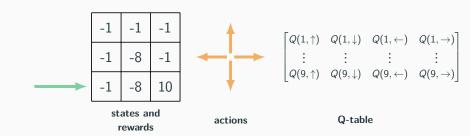
# **Artificial Intelligence**



## Reinforcement Learning schema

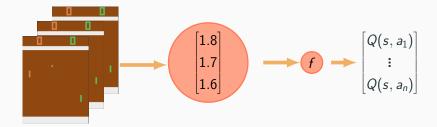


## **Q**-learning

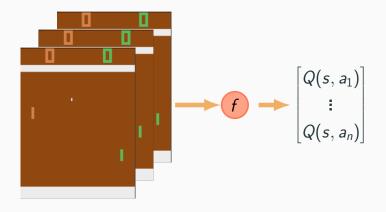


### **RL** and feature engineering

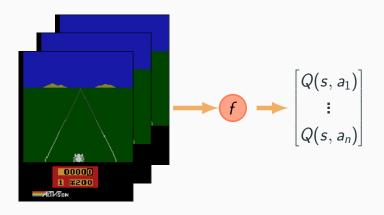
The pong game can have  $256^{84 \times 84 \times 3}$  different states.



## **Deep Q-learning**



#### **Deep Q-learning**



#### Referências i



R. S. Sutton and A. G. Barto.

Reinforcement Learning: An Introduction.

MIT Press, 1998.