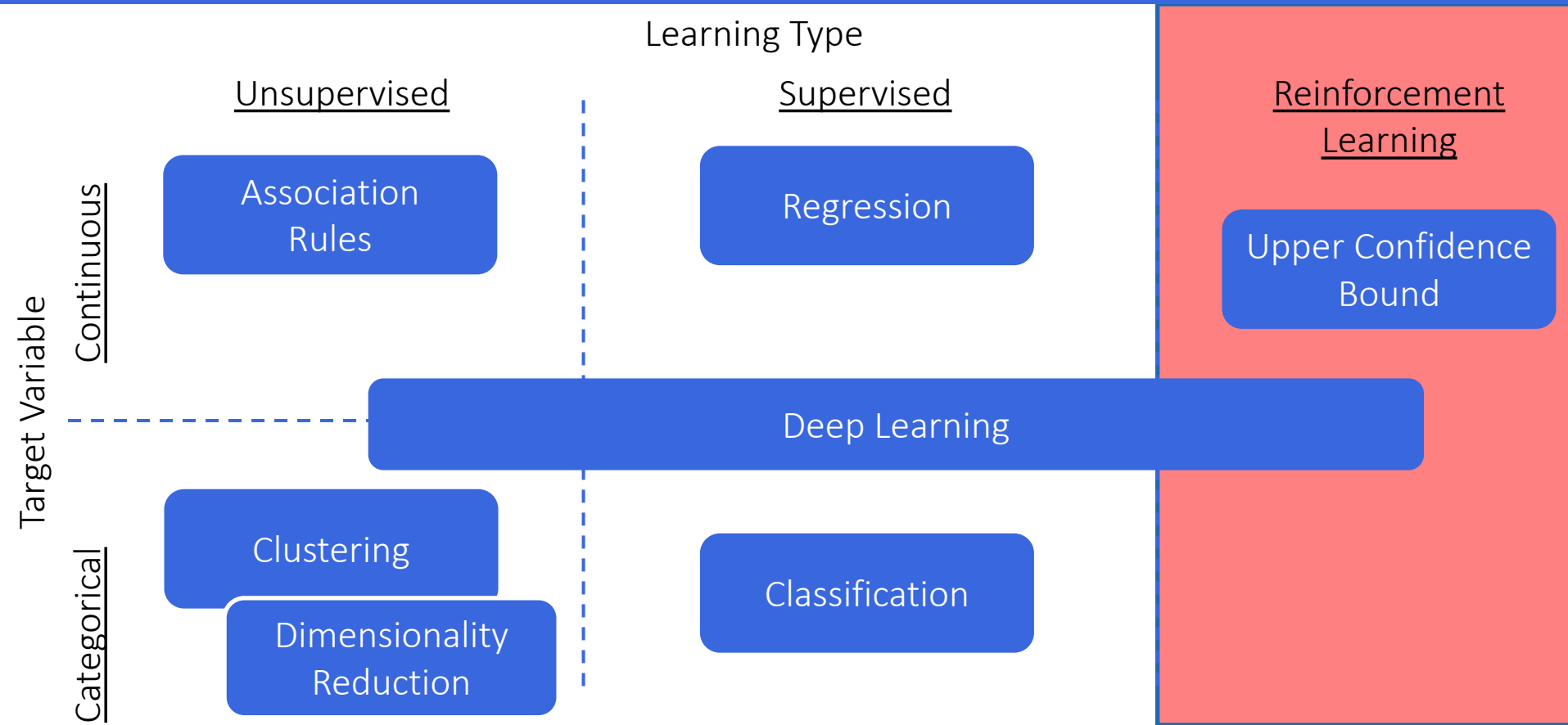


Reinforcement Learning 101

Reinforcement Learning

Machine Learning Map



Reinforcement Learning

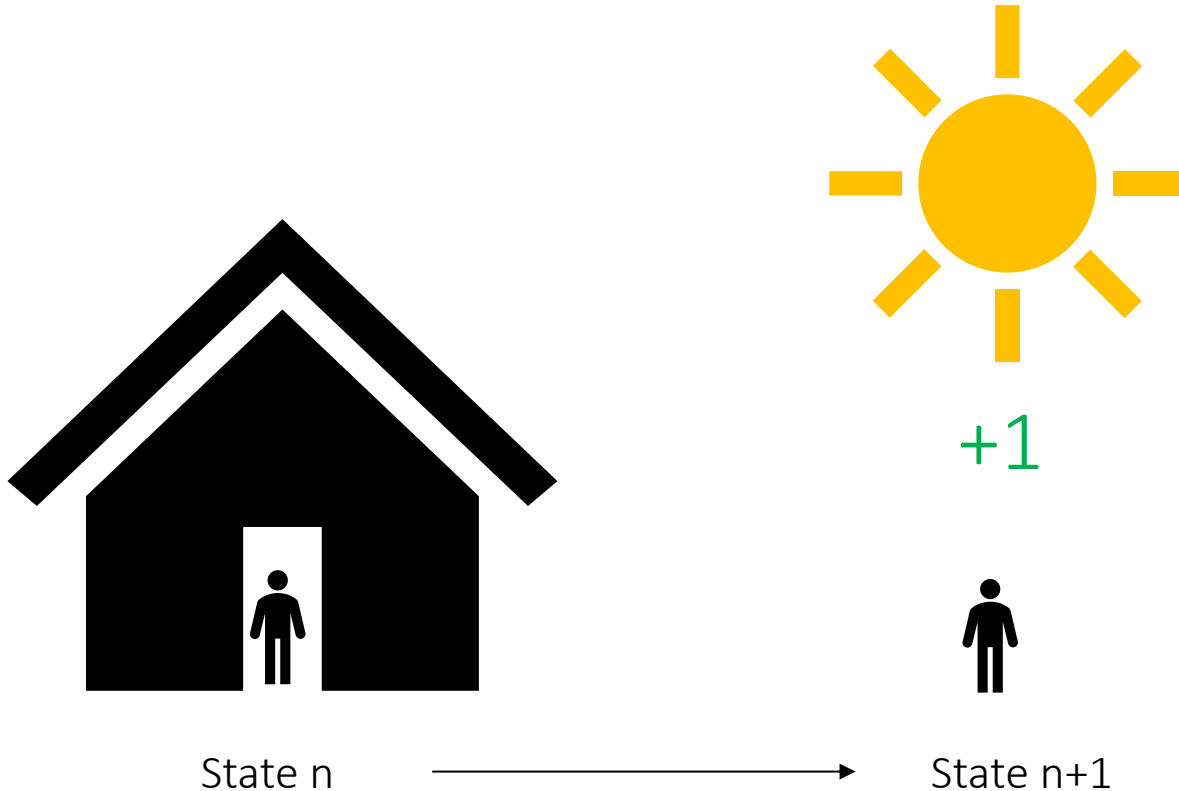
Introduction

- type of Machine Learning
- components:
 - agent,
 - environment,
 - state,
 - reward
- process involves trial and error
- exploration / exploitation



Reinforcement Learning

Simple Example



Reinforcement Learning

Simple Example



Reinforcement Learning

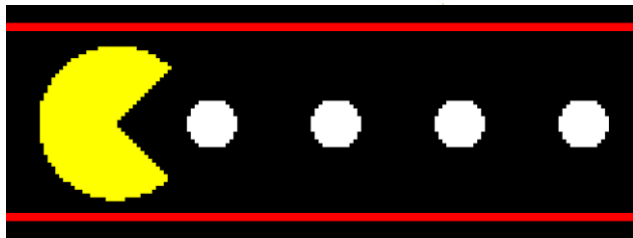
Simple Example



Reinforcement Learning

Examples

Games



Robotics



Self-Driving Cars

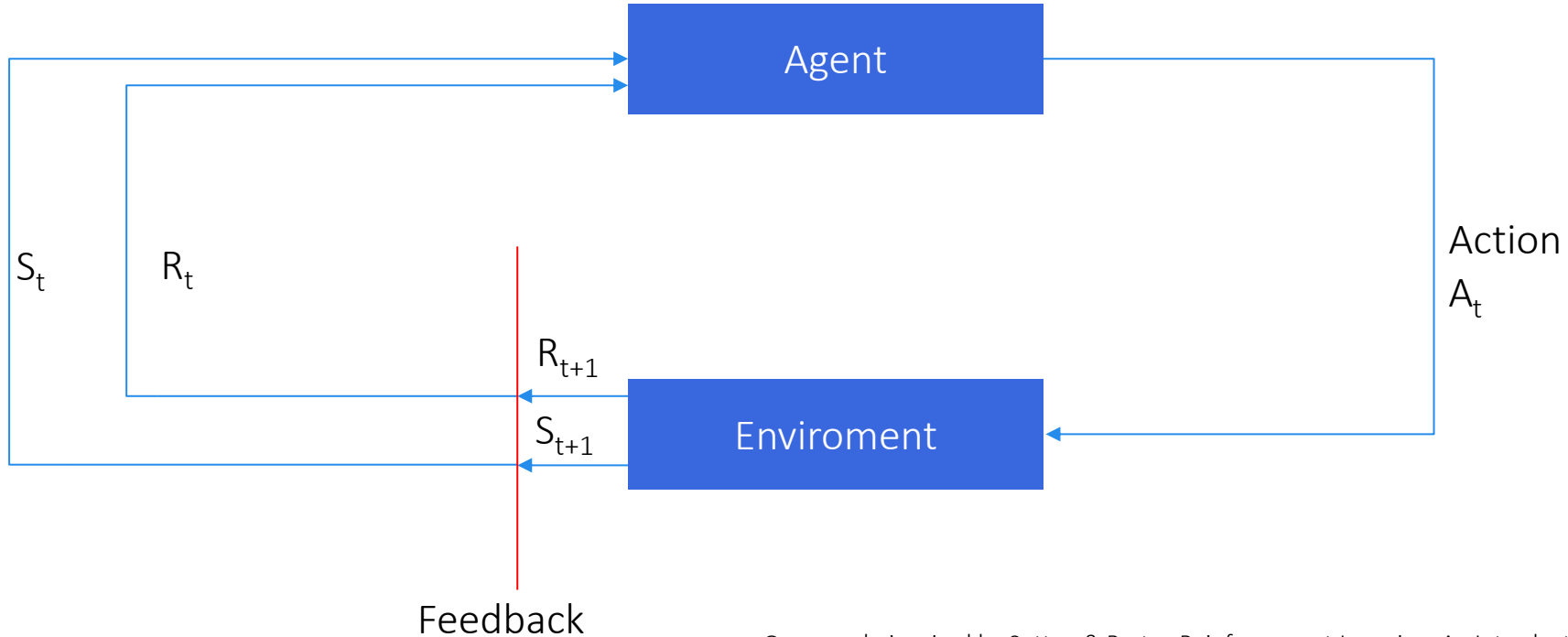


Source: https://upload.wikimedia.org/wikipedia/commons/thumb/c/cf/Waymo_self-driving_car_front_view.gk.jpg/220px-Waymo_self-driving_car_front_view.gk.jpg

Source: <https://www.bostondynamics.com/atlas>

Reinforcement Learning

Process



Own graph, inspired by Sutton & Barto „Reinforcement Learning: An Introduction“

Reinforcement Learning

From RL to Deep RL

