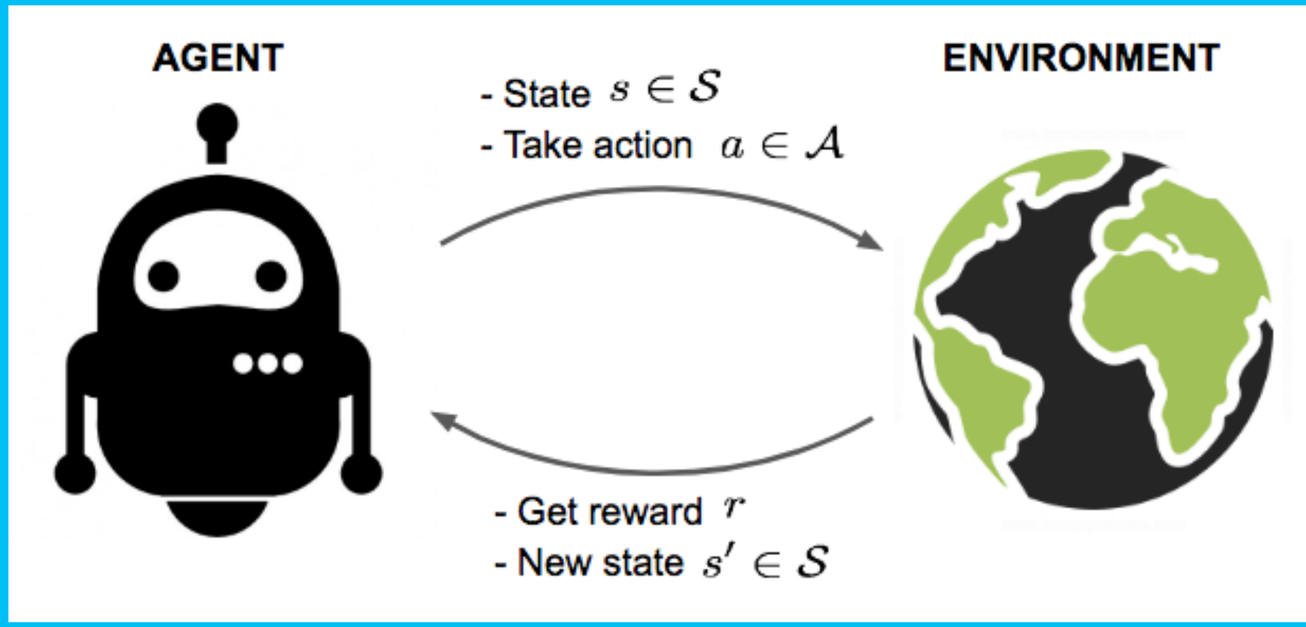
DEEP REINFORCEMENT LEARNING

A BASIC ALGORITHM

- Play 100 **random moves**, and store the results
- Train a **neural net** on those 100 observations:
  - **features** = a 2048 grid & a move
  - **target** = the score
- Play 100 new moves:
  - 50% at **random**
  - 50% using the **neural net**
- **Re-train** the neural net on those new observations
- **Repeat** those steps (“reinforce”)



YEAR 2048

PROJECT TIMELINE

1. Get familiar with **RL concepts**
2. Setup the dev environnement:
   - **2048** library
   - **Reinforcement Learning** library (TensorForce)
3. Implement a decent **baseline**
4. Implement a simple **Q-learning** algorithm
5. **Improve** the algorithm & **tune** it
6. Play a live 2048 game during the **Demo Day**!