* **Lecture 1 Introduce to RL**

1. Learning (Deep Learning) & Searching (Reinforcement Learning)

Learning -> Pattern, Searching -> Optimization

1. The advantage of reinforcement learning is that it may result in better performance than supervised learning because of the exploration. And it very ideal for tasks where there is no clear ground truth.
2. RL is should not be only learning from trial and error. Like humans, we can learn quickly from few examples.
3. Thinking about how humans learn may be a good way to design algorithms.