Overview of this course
What you will learn in this class

- Search algorithms (BFS/DFS, constrained, two-player) <u>(usually before midterm)</u>

  - Finding the path to solution on a graph, simple chess games

- Logic expressions and inference (automated) <u>(usually after the midterm)</u>

  - The square of any real numbers are positive, 1 is a real number

  - How to proof $1^2 \geq 0$

- Bayesian Networks (when with uncertainty)

  - Windy may lead to Rainy, Rainy may lead to traffic jam

  - How will windy affect the probability of traffic jam

Overview of this course
What you will NOT learn in this course

- Modern Machine Learning / Deep Learning

    - Linear Regressions, SVMs, Neural Networks (CNNs, LSTMs, transformers..)

- Modern Reinforcement Learning (RL)

    - Deep RL (DQN, Atari Games, alpha-go, self-driving…)

- *This materials in this class serves as generic foundations for an AI system*