

# Artificial Intelligence Theories CES 510



Benha University

Computer Systems Engineering Electrical Engineering Department

#### Faculty of Engineering (at Shoubra)

# **Semester Project**

# **Problem Statement:**

Go (traditional Chinese: 圍棋; simplified Chinese: 围棋; pinyin: About this sound wéiqí; Japanese: 囲碁; rōmaji: igo; Korean: 바둑; romaja: baduk; literally: "encircling game") is an abstract strategy board game for two players, in which the aim is to surround more territory than the opponent.<sup>1</sup> Using your favorite programming language, apply what you have learned during Artificial Intelligence Theories course to **design** and **implement** two different rational agents for playing GO. The two agents must be able to play against each other or against agents of other groups.

# **Deliverables (**in electronic form**)**:

- 1. A detailed report covering:
  - a) Task environment
  - b) Structure of agents
  - c) Used techniques
  - d) Results and comparison
- 2. Complete source code (in a ready to work state)
- 3. Presentation Slides

# **Timeline:**

- Checkpoint (one week before the midterm exam)
- Final Evaluation (one week before the final exam)

# **Grading:**

The project is worth **10 points** distributed as follows:

- Design (5 points)
- Implementation (3 points)
- Presentation (2 points)

# Groups:

Groups of **not more than two** students are allowed.

Good Luck Dr. Islam ElShaarawy

<sup>1 &</sup>lt;u>https://en.wikipedia.org/wiki/Go (game)</u>