# Artificial Intelligence (CS303)

Course Information

#### Instructors

#### Bo YUAN (袁博)

Office 408, South Tower, CoE Building yuanb@sustech.edu.cn

Open Office Hours: 14:00 – 16:00, on Wednesday of every teaching week

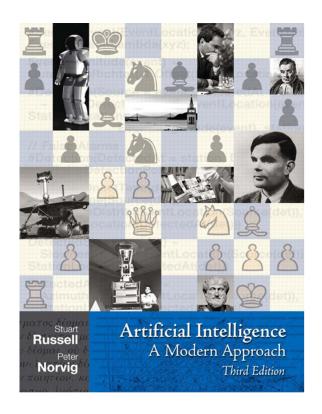
#### Yao ZHAO (赵耀)

Office 111, South Tower, CoE Building zhaoy6@sustech.edu.cn

#### Tutors

- Teaching Assistants
- Please do not expect immediate response from us, although we will do our best to support your study as much as possible.

- Main reference
  - Artificial Intelligence A Modern Approach (3<sup>rd</sup> Edition)
  - S. Russel & P. Norvig
  - A big book (27 chapters)
  - Pre-knowledge: algorithm, data structure, complexity, calculus, probability, and linear algebra.



#### Structure

- Introduction & Intelligent Agent
- Uninformed Search & Informed Search & Local Search & Adversarial Search
- Constraint Satisfaction Problems
- Logic
- Machine Learning (Concept & Linear Model & Neural Networks & Decision Tree & Naive Bayes & Ensemble & Clustering & SVM & RL)
- Natural Language Processing

### Projects

• 3 near-industry/academia-level projects

### Requirements

- Final Score depends on: (final-exam) + (project + class performance)
- The weights are approximately 1:1
- Please do not negotiate for more scores (no matter for what reason), unless we make a mistake in calculating your scores.
- Please join the Sakai site of this course: CS303 fall2022
- Please join the QQ Group of this course: 573595614
- Note: The 3 projects are crucial.
  - e.g., if you never attend and submit only 1 out of 3 projects, you probably will fail.

### Projects

- 3 projects in total.
- We can elaborate on the project requirements in lab, but will not provide technical support (you can search for and use any online materials though).
- Please finish the 3 projects **independently** (good chance to practice/prepare for your postgraduate study or job).
- Project report/program submitted after the deadline will be marked 0.
- Discussions and sharing are encouraged, but duplicated submissions, either program or report, will be marked 0 for all involved submissions.

### **About Al**

• Is Al a threat to our humankind? "The development of full artificial intelligence could spell the end of the human race." Prof. Stephen Hawking

• Al is a flourishing and exciting field: everyone can contribute.

Looking forward for an exciting learning AI journey together!

# To be continued