# Artificial Intelligence (CS311)

Course Information

#### Instructors

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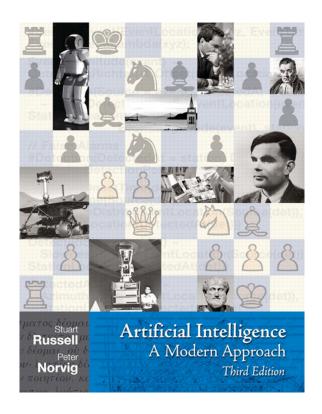
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Open Office Hours: 16:30 – 18:30, on Friday of every teaching week

#### 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 & Reinforcement Learning
- Natural Language Processing

### Projects

• 3 mini-projects

### Requirements

- Final Score depends on: (final-exam) + (lab + project)
- 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 QQ Group of this course.
- Note: The 3 mini-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