



COMPSCI 761: ADVANCED TOPICS IN ARTIFICIAL INTELLIGENCE

COURSE INTRODUCTION

Anna Trofimova, July 2022

ABOUT ME

- Anna Trofimova
- Lectures weeks 1-6
- Joined UoA in April 2022
- Area of expertise - AI & Machine Learning, Human-Robot Interaction
- Also teaching COMPSCI 399 - Capstone Course



Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
13:00 - 14:00					
14:00 - 15:00					Lecture 303-G01
15:00 - 16:00	Lecture 302-G20	Lecture 302-G20			
16:00 - 17:00					
17:00 - 18:00	Q&A 303-G16 (weeks 2-6)				
18:00 - 19:00					

PLANNED TOPICS

Themes

- Problem solving: search, heuristics, constraint satisfaction, reasoning
- Representation: search space, knowledge, semantics
- Uncertainty: lack of knowledge, probability

Content

- Artificial Intelligence
- Agents & Environments
- Search
- Constraint Satisfaction
- Logic
- Planning
- Reasoning with Uncertainty
- Natural Language Processing

COURSE MATERIAL & REFERENCES

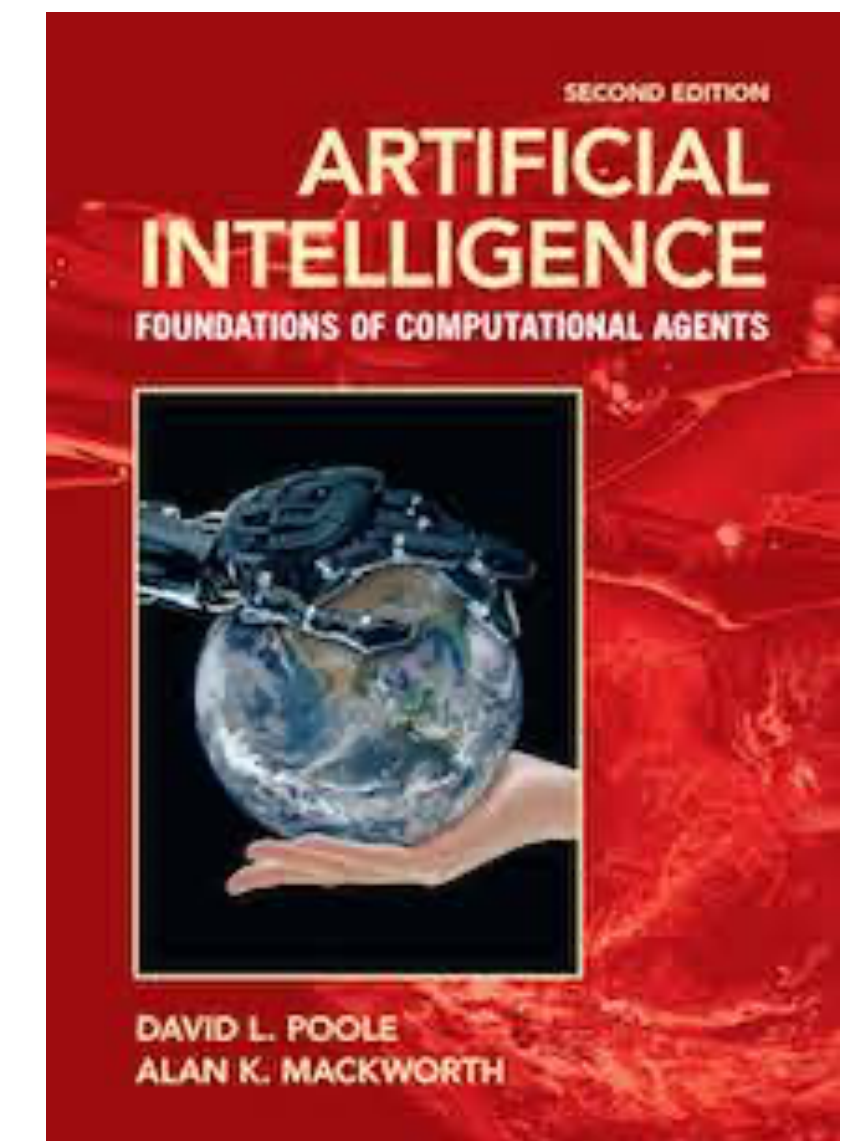
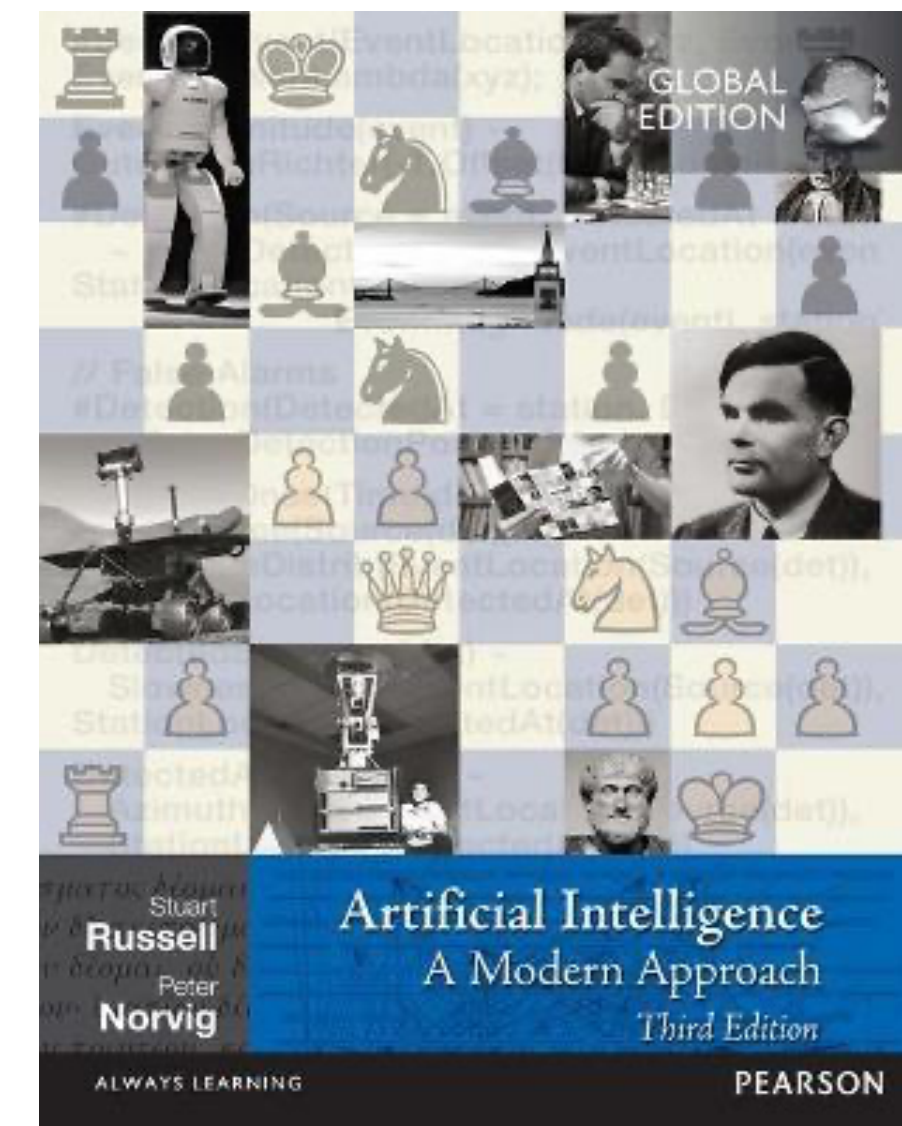
Course material: Canvas

Q&A: Piazza (access through Canvas)

Textbooks:

Artificial Intelligence – A Modern Approach, S. Russell and P. Norvig, 3rd or 4th edition (You may find electronic version through Google)

Artificial Intelligence - Foundations of Computational Agents, D. Pool and A. Mackworth, 2nd edition (Available at <https://artint.info>)



Assessment

- Assignments - 40%
 - Assignment 1 (weeks 1-6) - 20% - **August 19**
 - Assignment 2 (weeks 7-9) - 10% - TBD (around September 30)
 - Assignment 3 (weeks 10-12) - 10% - TBD (around November 11)
- Mid-semester exam - 30% - **August 26**
 - Online, open-book, covers weeks 1-6
- Final exam - 30% - TBD
 - Online, open-book, covers weeks 7-12

PLAGIARISM

- ALL work submitted for assessment must be your own work
- for an individual assignment, collaborative work in the form of “think tanking” is encouraged, but students are not allowed to derive code together as a group during such discussions
- in the case of a group assignment, code must not be obtained from outside the group
- plagiarism detection software may be used on submitted work
- UoA Academic Integrity and Copyright Policy: <https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/academic-integrity-copyright.html>

TODAY

- Course introduction
- Past, present, and future of AI