CSU33061 Artificial Intelligence I

SEMESTER 2 (JAN-APR 2023)

The following is based on what I know as of 23 January 2023, and is subject to change.

In-person lectures scheduled for

Mon 9 am LB01 (Lloyd) Fri 2 pm LB01 (Lloyd)

will be recorded live on BB Collaborate Ultra in consideration for the ill and others unable to attend, ¹ following slides in

https://www.scss.tcd.ie/Tim.Fernando/AI

where links and announcements can be found (in addition to Blackboard). Be sure to refresh the webpage for updates made as the term progresses.

The main topics are

- Background: AI & computation
- Search: blind & informed (A*)
- Q-learning & Markov Decision Processes
- Constraint Satisfaction & Knowledge Representation
- Bayesian & Markov networks

Two useful textbooks are

Artificial Intelligence: A Modern Approach, by Stuart Russell and Peter Norvig (4th edn, 2020) aima.cs.berkeley.edu

and (building on familiarity with Prolog from CSU34011)

Artificial Intelligence: Foundations of Computational Agents, by David Poole and Alan Mackworth (2nd edn, 2017) artint.info/2e/html/ArtInt2e.html

Homework out in Weeks 3 and 8 (due 2 weeks later) will be worth 20% of your final mark, leaving 80% for the 2-hour in-person exam at the end.

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Instructor

¹There is *no* guarantee that everything of interest at lecture will make it into the recordings nor that questions asked online will be answered.