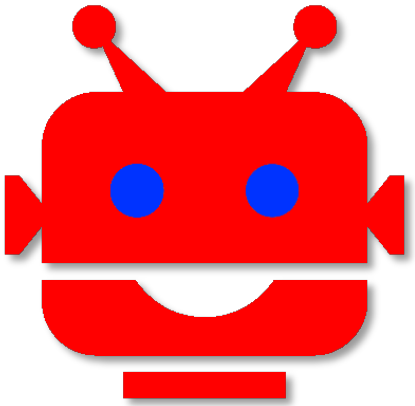


CMSC 671

Introduction to Artificial Intelligence

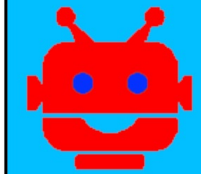
Course Overview

Fall 2021

Today's Class

- Course overview
- Introduction
  - Brief history of AI
  - What *is* AI? (and why is it so interesting?)
  - What's the state of AI now?

https://bit.ly/671f21



UMBC CMSC 671 Fall 2021
Principles of Artificial Intelligence

• home • about • schedule • hw • exams • notes • code • colab • github • resources • news • discord • webex •

This graduate course provides a general introduction to Artificial Intelligence concepts and techniques. We will cover a good part of the material in our text, Artificial Intelligence: A Modern Approach (fourth edition) by Stuart Russell and Peter Norvig, including the agent paradigm in AI systems, problem solving, search, game playing, knowledge representation and reasoning, natural language processing, planning, and machine learning .

Please see this Google doc for UMBC Policies and Resources during COVID-19.

See the about 671 page and the schedule for a more detailed breakdown but be aware that the order and timing is subject to change.

When and Where

- Synchronous lectures, ***Tue/Thr 1:00-2:15pm*** in person in room ***Fine Arts 306***

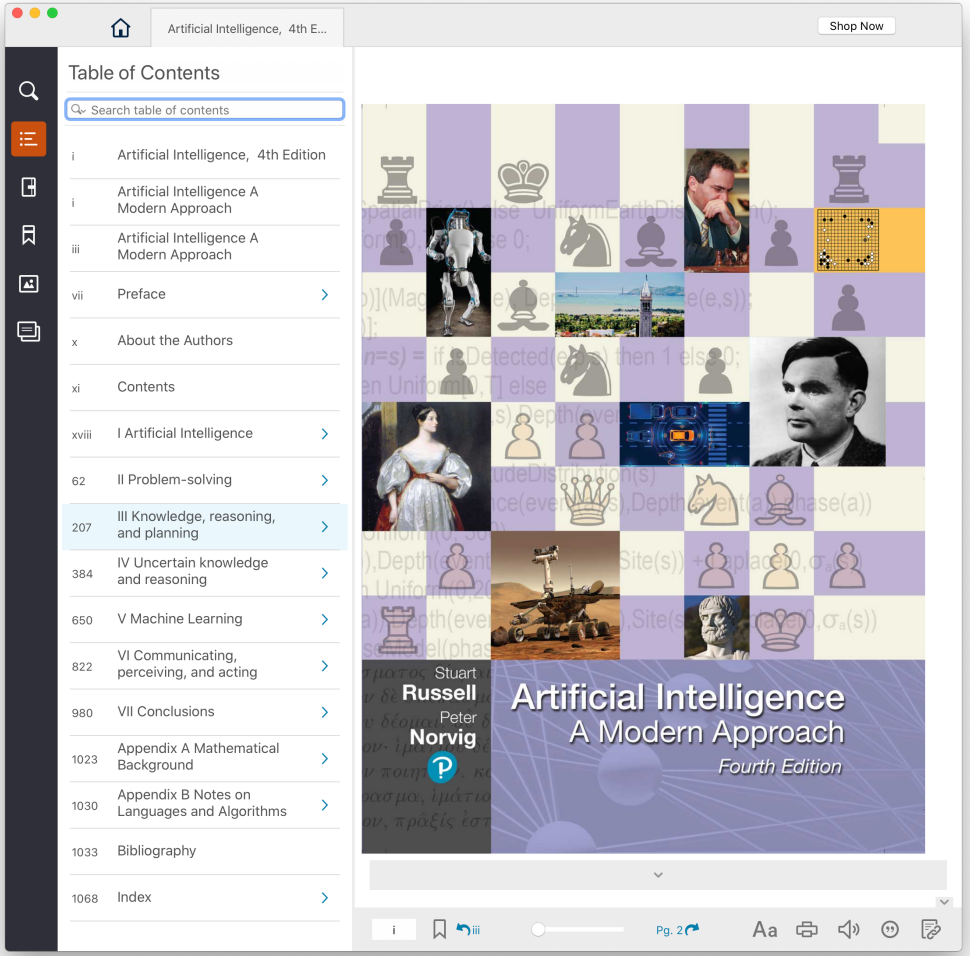
What

Recent AI News

- An idea crazy enough.....Artificial Intelligence
- How AI technology can tame the scientific literature
- tl;dr: this AI sums up research papers in a sentence
- We spoke to a Stanford prof on the tech and social impact of AI's powerful, emerging 'foundation models' • The Register
- Complete guide to understanding Node2Vec algorithm | by Tomaz Bratanic | Aug, 2021 | Towards Data Science

Text, CMI

- 4th edition of AIMA (2020) has lots of new material since the 2009 3rd edition
- UMBC CMI program charges $35 for a digital version, $160 on Amazon for hardcopy
- Access on Blackboard or down-load epub to computer/phone
- Opt-out of CMI via Blackboard



Homework and grading policies

- Six to eight short homework assignments (mix of written and programming)
  - One-time extensions of up to a week may be granted ***if requested in advance***
  - Last-minute requests for extensions probably will not be granted
- ***Do the reading before each class!***

Programming

- Programming assignments in Python
  - We'll use Python 3 in the notes and examples
- We'll use GitHub to share code, Jupyter notebooks and for HW submission
- Some assignments may require other systems
  - E.g., C5 decision tree learning system, Weka Machine learning environments

Exams and Quizes

- We may have periodic short quizzes (0-10%)
  - On Blackboard every other week or so, mostly to motivate you to keep up with the reading and classes
- Midterm exam (15-20%)
  - In person or on Blackboard, October 10?
- Final exam (25-30%)
  - In person or on Blackboard, December 15?
  - Comprehensive with an emphasis on last half of material (e.g., 30/70 split)
- Homework (45-50%)

Instructor availability

- Professor Finin, finin@umbc.edu
  - Office hours: TBD on Webex and/or in person
- Ask general questions to Discord first
  - We'll try to respond within 24 hours
- TA: Jinglong Sun, jsun2@umbc.edu
- Grader: TBD
- If needed, we may try holding help session on Discord