CMSC 671

Principles of Artificial Intelligence

Course Overview

Fall 2020

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?

UMBC CMSC 471 Introduction
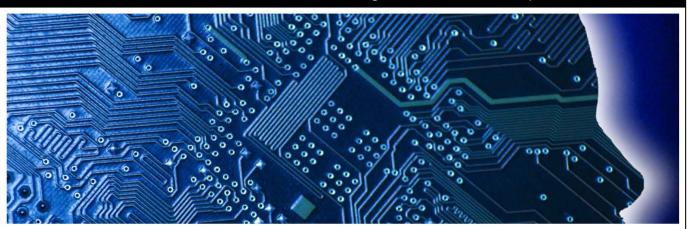
csee.umbc.edu/courses/671/fall20/

UMBC CMSC 671 Fall 2020
Principles of Artificial Intelligence

• home • about • schedule • hw • exams • notes • code • colab • github • resources • news • piazza • discord • webex •
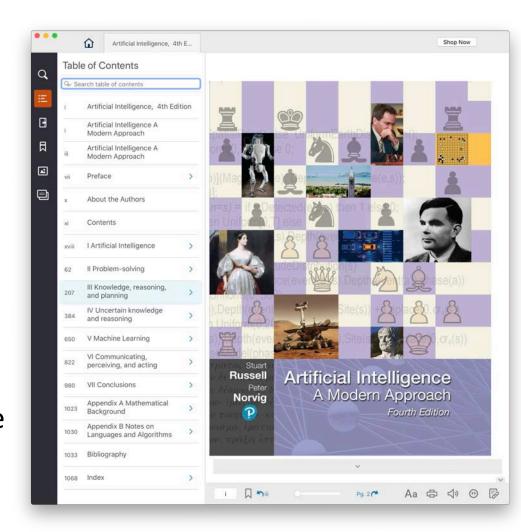
This graduate course provides a general introduction to Artificial Intelligence concepts and techniques. We will cover a good part of the material in our text, Artificial Intelligence: A Modern Approach (fourth edition) by Stuart Russell and Peter Norvig, including the agent paradigm in AI systems, problem solving, search, game playing, knowledge representationand reasoning, natural

AI News

Knowledge Graph

Text, CMI

- 4th edition of AIMA (2020) has lots of new material since the 2009 3rd edition
- UMBC CMI program charges $44 for a digital version, $160 on Amazon for hardcopy
- Access on Blackboard or download to computer/phone
- Opt-out of CMI via form

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

- Periodic short quizzes (10%)
  - On Blackboard every other week or so
- Midterm exam (15%)
  - On Blackboard, October 10
- Final exam (25%)
  - On Blackboard, December 15
  - Comprehensive with an emphasis on last half of material (e.g., 30/70 split)

Instructor availability

- Professor Finin, finin@umbc.edu

  - Office hours: Tue/Fri 9-10 on Webex

- Direct general questions to Piazza first

  - We'll try to respond within 24 hours

- TA: Tiantian Xie, xtiant1@umbc.edu

- Grader: Pratik Pradeep Jogdand, pratikj1@umbc.edu

- If needed, we may try holding help session on Discord