

# **CMSC 471**

## **Introduction to Artificial Intelligence**

### **Course Overview**

**Spring 2022**

# Today's Class

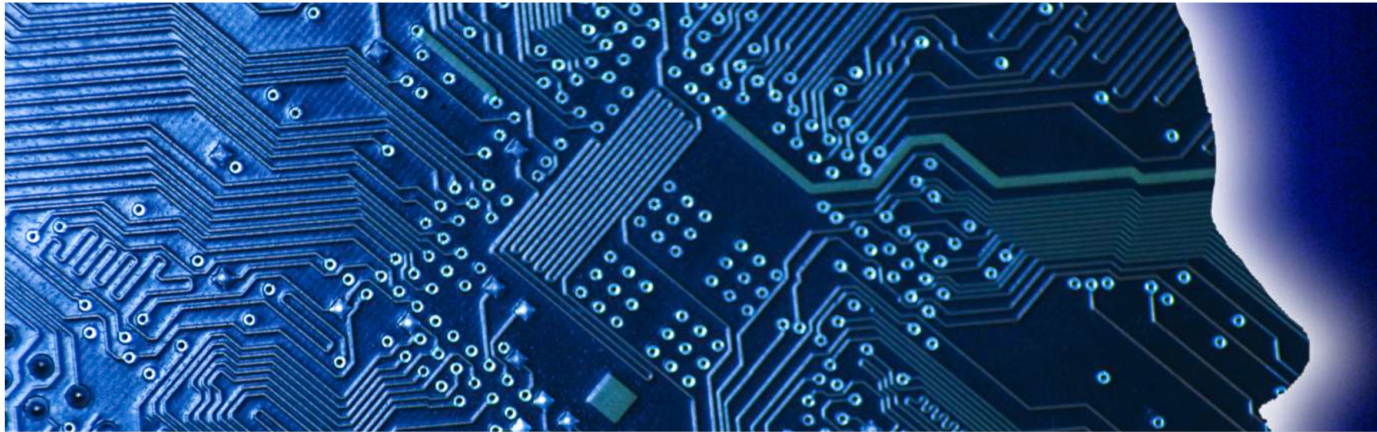
- Course overview
- Introduction
  - Brief history of AI
  - What *is* AI? (and why is it so interesting?)
  - What's the state of AI now?

# <https://bit.ly/471s22>



## UMBC CMSC 471 Spring 2022 Introduction to Artificial Intelligence

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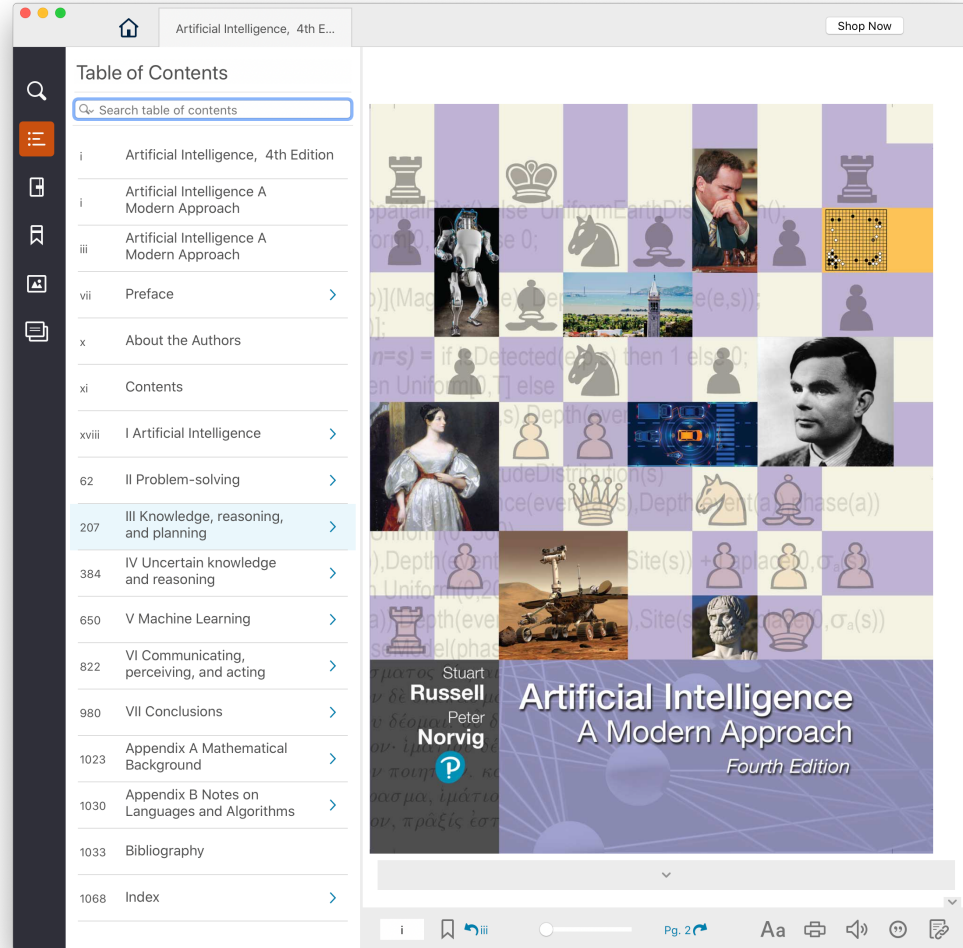
This undergraduate course provides a general introduction to Artificial Intelligence concepts and techniques. We will cover a good part of the material in our text, [Artificial Intelligence: A Modern Approach](#) (fourth edition) by Stuart Russell and Peter Norvig, including the agent paradigm in AI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

### Recent AI News

- [Professor's perceptron paved the way for AI – 60 years too soon](#)
- [Solve Wordle with first guess via machine learning](#)

# Text, CMI

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



# Homework and grading policies

- ~Six 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
  - You'll need to install some Python packages
- Some assignments may require other systems
  - E.g., C5 decision tree software, Weka Machine learning environments

# Exams and Quizzes

- 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, March 17?
- Final exam (25-30%)
  - In person or on Blackboard, mid-May
  - Comprehensive with an emphasis on last half of material (e.g., 30/70 split)
- Homework (45-50%)

# Instructor availability

- Professor Tim Finin, [finin@umbc.edu](mailto:finin@umbc.edu)
  - Office hour: Wed 10-11 on [Webex](#) and/or in person by arrangement (329 ITE)
- Ask general questions on Discord first
  - We'll try to respond within 24 hours
- TA: Prajna Bhandary, [praj nab1@umbc.edu](mailto:praj nab1@umbc.edu), ITE334
- If needed, we may try holding help session on Discord