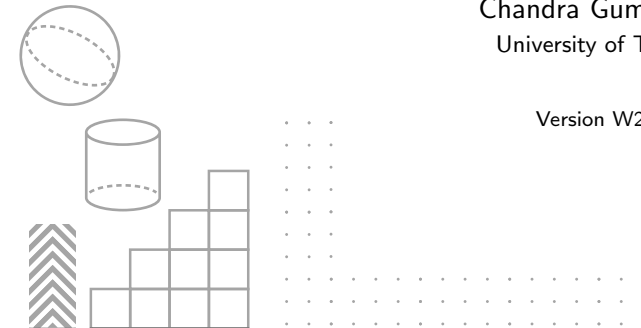# Chapter 1
Motivations and Content

Introduction to Artificial Intelligence

Chandra Gummaluru

University of Toronto

Version W22.1

- The following is based on material developed by many individuals, including (but not limited to):

    - Sheila McIlraith
    - Bahar Aameri
    - Fahiem Bacchus
    - Sonya Allin

- Intelligence is a difficult concept to define precisely. According to Merriam-Webster, it is defined as:

  the ability to learn or understand or to deal with new situations.

- If we accept this definition, we can argue that artificial intelligence (A.I.) is then any non-living agent that posses such an ability.

- Creating such an agent is the goal of A.I. research.

- Our goal here is to introduce several skills that any intelligent agent should posses, and develop ways to instil them into the ones we create.

- We will focus on three skills in particular:
  1. searching (chpts. 2 - 6)
  2. handling uncertainty (chpts. 7 - 8)
  3. representing knowledge (chpts. 9 - 10)
- We will not go in-depth into any particular skill.
- Instead, our goal is to develop a broad understanding of the field as a whole.