#### This week's highlights

- Evaluate the truth value of a compound proposition given truth values of its constituent variables.
- Prove propositional equivalences using truth tables
- Prove propositional equivalences using other known equivalences, e.g.
  - DeMorgan's laws
  - Double negation laws
  - Distributive laws, etc.
- Compute the CNF and DNF of a given compound proposition.
- Translate sentences from English to propositional logic using appropriate propositional variables and boolean operators.
- Form the converse, contrapositive, and inverse of a given conditional statement.
- Decide and justify whether or not a collection of propositions is consistent.

#### Lecture videos

Monday: No class in observance of Martin Luther King day.

A video to reflect on the role of algorithms in systemic racism. Credit: Safiya Umoja Noble.

Week 3 Day 1 YouTube playlist

Week 3 Day 2 YouTube playlist

# Wednesday January 20

# Friday January 22

### Review quiz questions

- 1. Wednesday
- 2. Wednesday

- 3. Friday
- 4. Friday