

**COMP 300 Automata, Formal Languages, and Computability**  
**Final Exam/Reflection**  
**Spring 2023**

This final reflection is a personal reflection of what you have learned about computability in this course. You should complete this without the assistance of other people, though you may refer to the textbook for the course and your homework and notes from class. This is a chance to reflect and demonstrate what **YOU** have learned.

If you have any questions about this reflection, they should be directed to your instructor. Type or scan your reflection and submit it on Kit.

**Final Reflection Prompts**

- 1) (Concept reflection) Think about and write a well-formed response to the foundational question of this course: *What can be (efficiently) computed?*

Your answer may include some discussion about different models of computing, decidable problems, undecidable problems, intractable problems, the Church-Turing thesis and its significance, the Halting problem and its significance, and/or Rice's Theorem and its significance. Understanding that we did not fully cover the ideas of efficiency in terms of P, NP, and NP-Complete, do your best to include this to some extent in your answer. Frame your reflection in a way that best fits the big ideas about what you learned in this class.

- 2) (Reflection on personal growth) What topic(s) did you find to be the most interesting? What did you find to be the most challenging? Thinking back to the beginning of the quarter when you discussed why you were taking this course and what you hoped to get out of it (see Reflection A), how does what you learned meet your goal(s)? What idea(s) do you think will stick with you as you take more CS courses or as you graduate and start a new path?