

2026 CMPUT 670 project

Implement a computer program (solver, player, visualizer, tutor, analyser or other app) or **explore an open research problem** related to a particular combinatorial game or to combinatorial game theory. **Before you start, check with me that your project is appropriate.** **writing** latex article (12-point, geometry:3cm margins, linespread 1.25), bibtex, at a level easily understood by a 2nd-year CS undergrad. **grading** poor $\leq 65\%$, ok 65–75%, good 75–85%, publishable $\geq 90\%$.

2-page proposal

- is this a player, solver, visualizer, tutor, research exploration, or something else? why is it of interest to you? how is it relevant to CGT? why is it interesting to others? what do you hope to accomplish? what problems will you solve, what programs will you implement? how will you measure success? what computational aspect is there? what mathematical aspect is there? how you will break it into subgoals (like Polya would)?

5-page intro, motivation, background, bibliography, progress

- progress: your original goals? are you on target? if not, what are your revised goals?

20-minute in-class presentation

- at most 6 slides

5-page report

- final report. what did you achieve? how? what remains open?