

Final Project Proposal

Intro

For the final project, I would like to implement a program for Conway's Game of Life in parallel to compare performance on large grids and complex inputs.

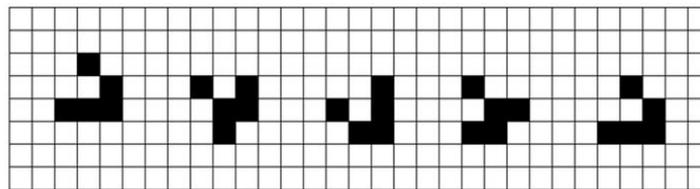
Background

The Game of Life is a grid based "zero player game" where an initial state is defined by the player, and the next states are computed using a set of rules (there are many variations on this game). The original set of rules created by John Horton Conway are:

(From https://www.conwaylife.com/wiki/Conway%27s_Game_of_Life#Rules)

1. Any live cell with fewer than two live neighbours dies (referred to as **underpopulation** or **exposure**^[1]).
2. Any live cell with more than three live neighbours dies (referred to as **overpopulation** or **overcrowding**).
3. Any live cell with two or three live neighbours lives, unchanged, to the next generation.
4. Any dead cell with exactly three live neighbours will come to life.

Game of Life Small Grid w/ Steps



Step: 1 2 3 4 5

Game of Life Large Grid

