

## Cellular Automata

The goal of the presentation is to discuss cellular automata. A good starting point is

- [http://en.wikipedia.org/wiki/Cellular\\_automata](http://en.wikipedia.org/wiki/Cellular_automata)
- [http://en.wikipedia.org/wiki/Conway%27s\\_Game\\_of\\_Life](http://en.wikipedia.org/wiki/Conway%27s_Game_of_Life)

Your presentation should include a discussion of

- What cellular automata are in general
- 1 dimensional and 2 dimensional cellular automata
- Conway's game of "Life"
- A discussion of the fact that any computer program can be encoded in the game of "Life"

In addition your presentation should include at least one of

- An other 2 dimensional cellular automata other than life.
- A description of how Pascal's triangle can be regarded as a cellular automata.
- A history of Conway's game of "Life"

You should also feel free to expand on the above in any directions you would like (so long as they are related to the topic and not directly covered in class).

If you have any questions regarding the presentation feel free to e-mail your TA or Dr. Ackerman