

# Elementary Cellular Automaton

Presented 9/28/2015

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# Cellular Automata

- A grid of cells
- A list of possible states for a single cell
- A collection of rules governing state transitions

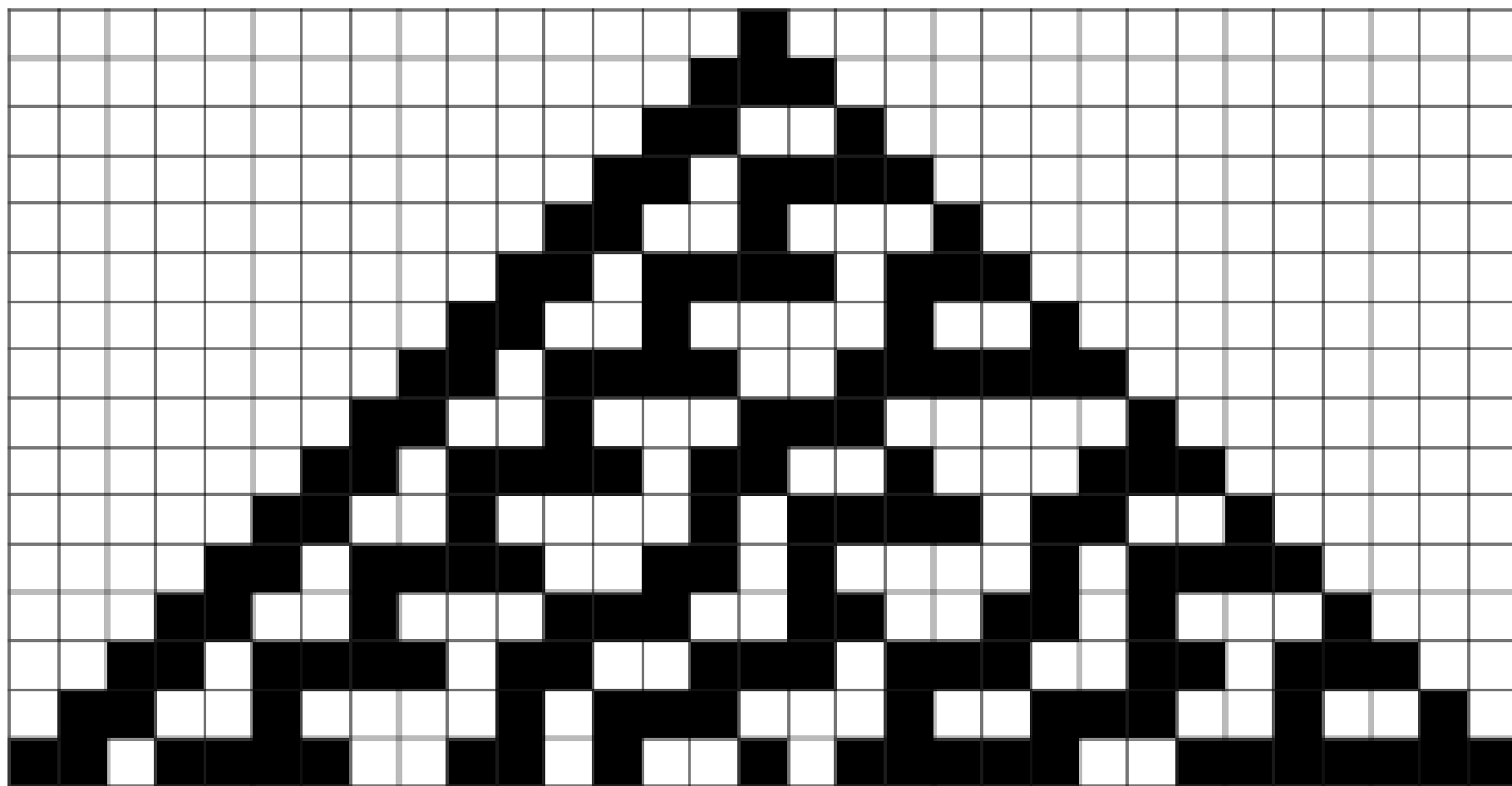
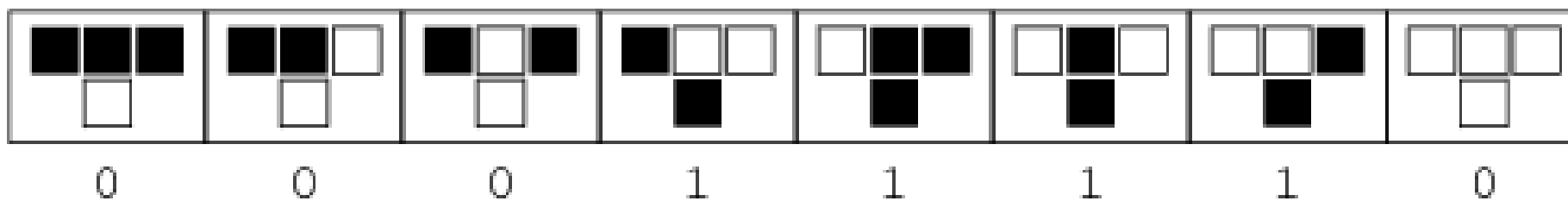
# Cellular Automata aren't just simulations

- They can do computations
- Propagating structures are like signals interacting
- They can act as universal computers

# Elementary Cellular Automata

- Only 2 cell states
- One dimension
- One rule ( OK well maybe more than one...)

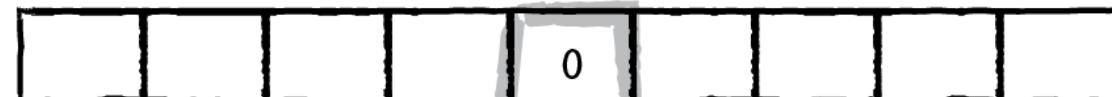
# *rule 30*



generation 0



generation 1



rule set:

0 0 0	0 0 1	0 1 0	0 1 1	1 0 0	1 0 1	1 1 0	1 1 1
↓	↓	↓	↓	↓	↓	↓	↓
0	1	0	1	1	0	1	0