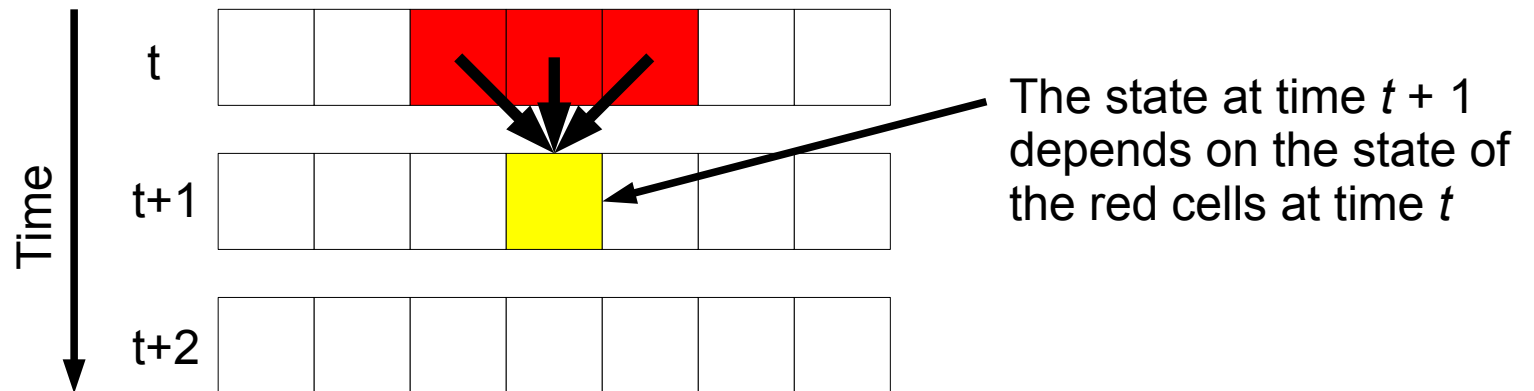
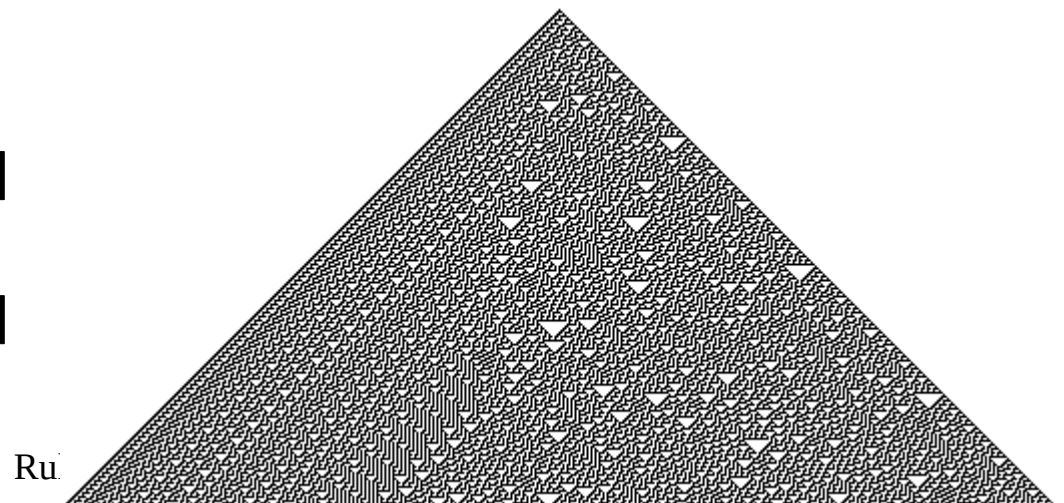
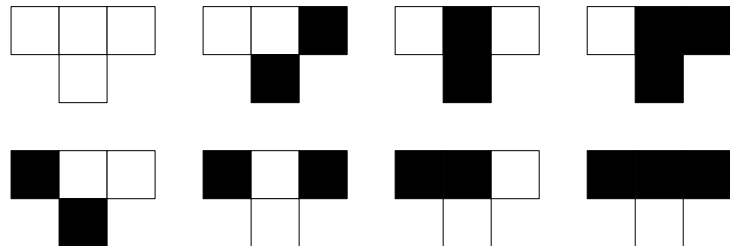


1D Stencil Example: Rule 30 Cellular Automaton

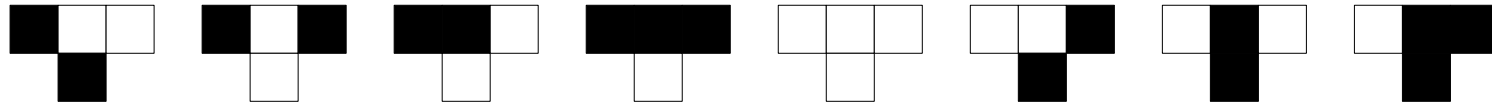


Rule 30 cellular automaton



Example

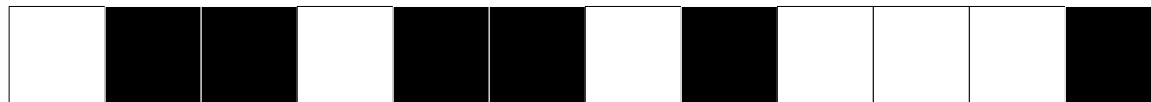
Rule 30 cellular automaton



Initial configuration



Configuration at time 1



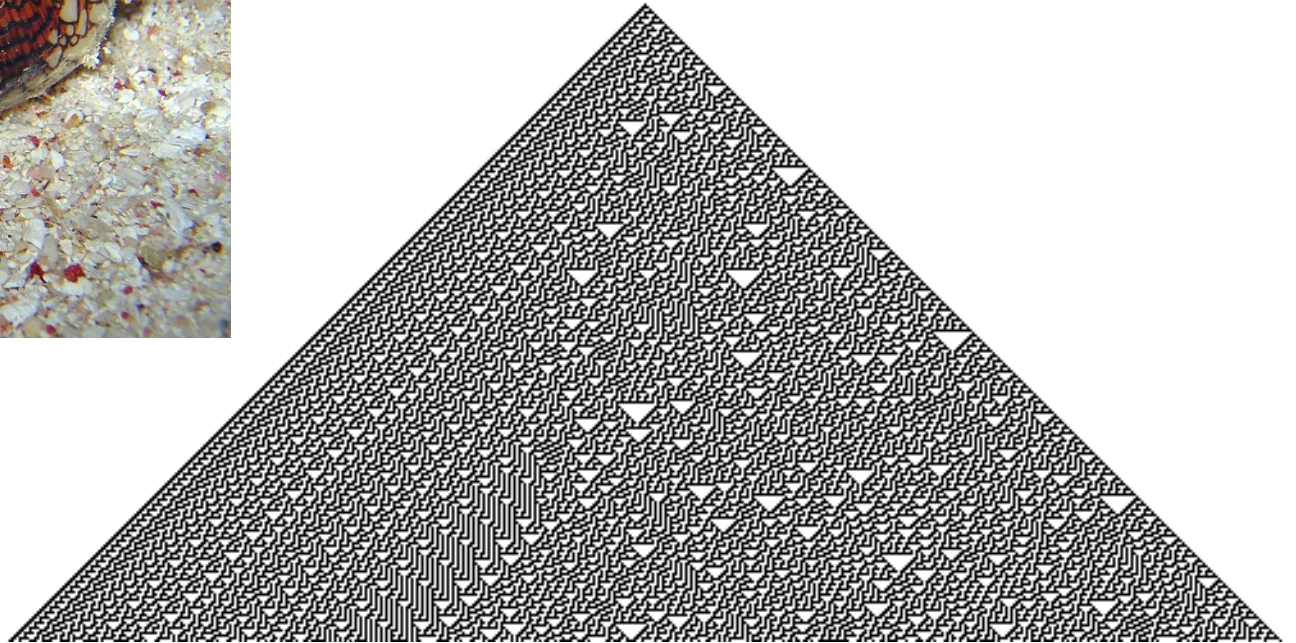
Configuration at time 2



Rule 30 cellular automaton



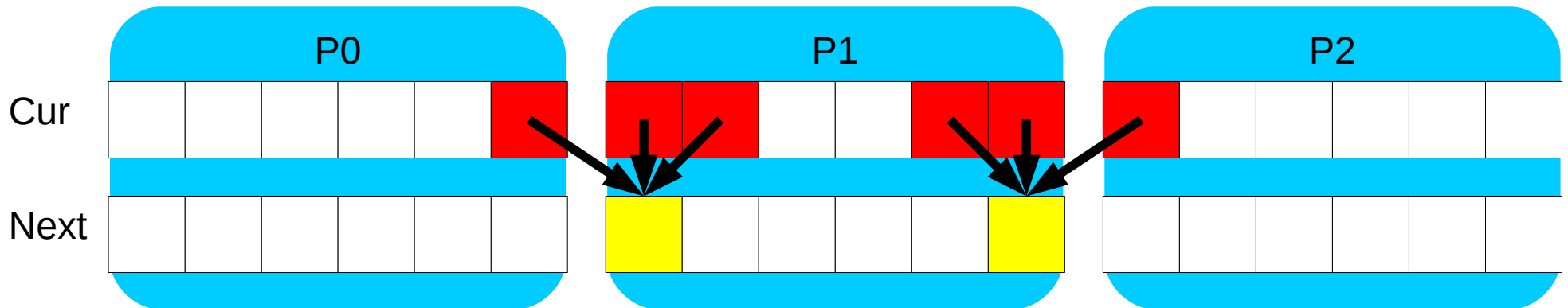
Conus textile shell



Rule 30 CA

1D Cellular Automata

- On distributed-memory architectures, care must be taken to properly handle cells on the border



- We use *ghost cells* to augment each sub-domain

Example

Rule 30 cellular automaton

