**CD++ Model Form**

Title: **CONSTRUCTIVE GENERATION METHODS FOR DUNGEONS**

Type: Cell-DEVS Model

Acronym/Short name: **DG**

Purpose for which Developed: To generate and join random dungeons using stimulation.

Other Applications for which it is Suitable: Can be upgraded to 3-D dungeon generation.

Date Developed/Implemented: 22th November, 2017

Domain: Other

Current Version:

URL:

Description (including characteristics): The “Constructive Generation Methods for Dungeons” proposed in a paper by Macro Niemann about Generation dungeon systems using cellular automata style rules. The key rule is known as "4-5 rule". A cell becomes a wall when it has more than 5 walls in its neighbor. A cell becomes a floor when it has less than 4 neighbors. Otherwise, it stays as is.

Links to Related documents

Short Title: Constructive Generation Methods for Dungeons

URL: <https://www.wi.uni-muenster.de/sites/wi/files/users/mpreu_02/games-> material/ba-vm-ss2015/marco\_niemann\_-\_constructive\_generation\_methods\_for\_dungeons\_-\_thesis.pdf

Description:

Keywords; dungeon, floor, walls, neighbors

Developer:

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Comments: Stimulation is working ok. One cycle is enough to generate an interesting set of dungeons. Other Cellular Automata rules, of course, may produce different dungeon patterns.