**CD++ Model Form**

Title: **CAVE SYSTEM GENERATION**

Type: Cell-DEVS Model

Acronym/Short name: **CSG**

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

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

Date Developed/Implemented: 16th November, 2016

Domain: Other

Current Version:

URL:

Description (including characteristics): The “Cave System generation” proposed in a paper by Ms. Dana about Generation cave 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: Cave system

URL: http://pixelenvy.ca/wa/ca\_cave.html

Description:

Keywords; cave, floor, walls, neighbors

Developer:

|  |  |
| --- | --- |
| Name: Princy | Acronym: |
| Address 1: Carleton University | E-mail: |
| Address 2: |  |
| City: Ottawa | Province/Country- Ontario, CA |
| Postal- | Phone- |

Comments: Stimulation is working ok. One cycle is enough to generate an interesting set of caverns. Other CA rules, of course, may produce different cave patterns.