

CG: L-Systems Fractal Generation of 3D Objects

Written by Marinka

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<p>One of the courses I attended this semester has been Computer Graphics (CG).</p> <p>I have spent some time studying algorithmic botany and especially L-systems, formal grammars for describing fractal objects. These can be used for generation of objects in biology, botany, and even buildings and entire cities. Rome Reborn is an example of such project, in which formal grammars were used for the creation of the 3D digital model illustrating the urban development of ancient Rome.</p> <p>So I have decided to visualize some of the 3D fractal objects using OpenGL and LWJGL library. Below are links to short report and presentation. Take a look :)</p> <p>Those of you who are interested, great book on this topic by the father of algorithmic botany, Aristid Lindenmayer. ♦ Prusinkiewicz, Przemyslaw; Aristid Lindenmayer (1990). The Algorithmic Beauty of Plants (The Virtual Laboratory). Springer-Verlag. ISBN 0-387-97297-8</p> L-Systems presentation (.pdf - in Slovene) L-Systems report (.pdf - in Slovene)