

This thesis presents a scriptable terrain height map generator. Its scripts are written in a powerful C-like scripting language. Terrain generation tools available include random noise generators, filters, combiners, masking functions and natural erosion simulators. Graphical script development environment which integrates the generator with modern code editor, interactive 3D height map viewer and other tools is presented. Existing terrain creation tools are analyzed. Various algorithms used in terrain generation are discussed. Example scripts written for this generator are presented.