

Generation of a 3D object from a Digital Elevation Model (DEM)

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07-04-2016

1 Abstract

Digital Elevation Models (DEMs) are 2D maps in which each point is associated with its height. They can be obtained through techniques such as *photogrammetry*¹, *lidar*², *land*³, *surveying*⁴, *etc*⁵. They represent the elevation of a terrain map

2 Bibliography

For this project, the first thing to do is to do a state-of-the-art of DEMs, that is, to try to *classify DEMs models (stereography, satellite, etc.)* and to *identify the different formats*⁶. The Project will be implemented in *C++/ Qt framework*⁷ and a visualisation in *OpenGL*⁸.

¹<https://somesite.net>

²<http://somesite.net>

³<http://somesite.net>

⁴<http://somesite.net>

⁵<http://somesite.net>

⁶<http://www.ngdc.noaa.gov/mgg/dem/>

⁷<http://http://www.qt.io/ide/>

⁸[opengl-superbible-comprehensive-tutorial-and-reference-5th-edition-2010](#)