

LAB 1 – PART A FUN WITH FUNCTIONS

Design your best 1D terrains

Using algebraic, trigonometric and algorithmic functions, create your four best 1D terrains. Create a report that explains:

- 1) The formula for each function.
- 2) The range and domain of each function.
- 3) Why you like each of these terrains.

Experiment with Gaussians, modulation, min/max, and compositional functions (change of variables).

I used <u>fooplot.com</u> to create the function above and then flood-filled in the area below the function. You can use that to "draft" a function. You will put this into a Unity script and 2D sprite to better show this. A simple Sprite population / replacement script will be given to you to show the result. You should go through the following tutorials for Unity though (please use Unity 4.6).

- <u>http://unity3d.com/learn/tutorials/modules/beginner/2d</u>
- <u>https://www.assetstore.unity3d.com/en/#!/content/11228</u>

Department of **Computer Science and Engineering**

Due Monday, January 21, 2015

Math is Fun!

Part B will build upon this

We will showcase these in class, so impress your fellow students

This part is worth 50 points

CSE 5914 Procedural Content Generation for Games

http://web.cse.ohiostate.edu/~crawfis/

Spring 2015