Center for Graphics and Geometric Computing

Lab Project 234326 proposal

Spring 2014

Animated Visualization of Tangent Vector Fields

Description:

Visualizing vector fields is a challenging problem, due to the amount of information that needs to be shown. Most visualization methods use a single image to visualize a fixed vector field. Your goal in this project is to build an animation based visualization for vector fields, in the spirit of: http://earth.nullschool.net/.

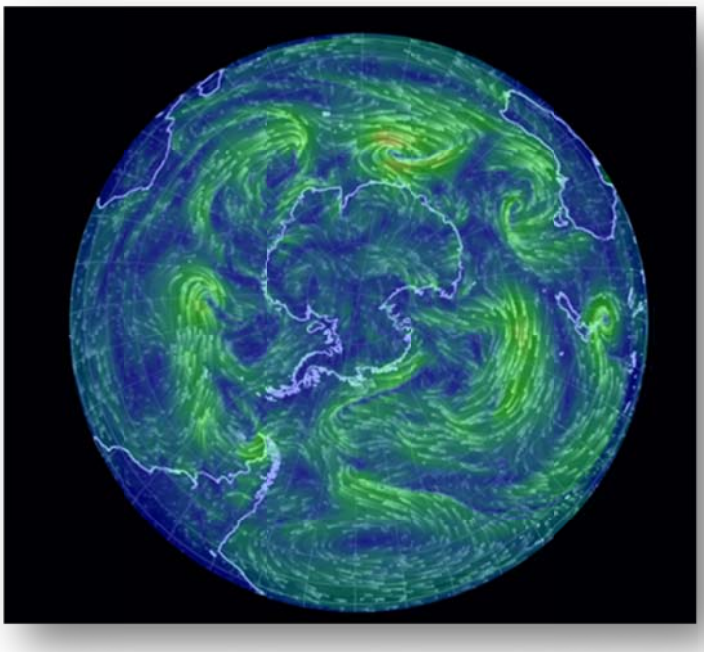
The input to your system would be a surface and a piecewise constant vector field, and the output would be real time visualization of the vector field, as in the previously mentioned link.

Prerequisites:

- Very good programming skills in C/C++
- Computer Graphics course 234325 and/or previous work experience with Open/GL and graphics
- Good approach to math

References:

http://earth.nullschool.net/.



Advisor:

Mirela Ben-Chen
Mirela@cs.technion.ac.il