UNDERGRADUATE RESEARCH IN SCIENCE CONFERENCE OF ALBERTA (URSCA) PROCEEDINGS VOL.2 | THE KING'S UNIVERSITY, EDMONTON | APRIL 1-2, 2016

12. Presenting Temporal vs. Spatial Information in a Meaningful Way

Tyler Kuipers, and Andrew Tappenden* (The King's University)

Oral Presentation Abstract:

Edmonton's river valley is one of the longest uninterrupted parks systems in North America. Throughout the summer of 2014 and 2015, an ongoing study was started on the different histories surrounding Edmonton's park system. One of the major challenges of this study was how to present the information gathered in a way that represented both time and space while engaging the viewer, presenting the data meaningfully, and maintaining ease of use. I will present a proposed solution for the spatial-temporal visualization problem by utilizing a Gaussian distribution constructed within a user given date range. The distribution dictates the alpha value of any given GIS feature. Using this method, we are able to easily manipulate the speed at which features are visible by changing the standard deviation of the distribution.

* Indicates faculty mentor