



**SDSU**  
presents  
a thesis defense for  
Master of Science  
degree in  
Computer Science

Wednesday,  
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GMCS 418

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## *Strategies for Drawing Dynamic Lines on Map*

### Abstract

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The MOJO map integrated with a simple user interface and a scroll bar to the right for drawing dynamic lines is the key feature of this tool. The user has to simply enter the coordinates and observe the behavior on the map. The tool helps in drawing line dynamically, which can have user defined color, speed, and type of the line. The line can either be dotted or a solid line based on requirements of the end user. Users for such a tool might have an explanation, like voyage of Columbus, or the building of trans-continental railroad. The dynamic line tool can be coordinated with a slider bar, where advancing the slider bar triggers drawing a new line segment. Thus it is easy to use the tool for drawing a polygonal paths and the application developer can draw Magellan's world tour with correct geography and rate of progress. The main motive behind developing such a tool is to have an interactive environment for the users, where the users can either belong to the GIS MOJO community or it can be any amateur users. The tool is developed keeping in mind that the end user may or may not have technical skills. The tool currently belongs to a generic category, but if required one can manipulate to make it entertaining and educative at the same time.

### Thesis Committee

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Carl Eckberg, Thesis Chair, Department of Computer Science  
Alan Riggins, Department of Computer Science  
Mark Dunster, Department of Mathematics & Statistics