Gerrymandering & Visualization

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Project Description: There has been a recent boom in interest in using mathematics to investigate gerrymandering and multiple research groups have been formed such as the Metric Geometry and Gerrymandering Group Redistricting Lab out of Tufts and Quantifying Gerrymandering at Duke. These groups have helped create a number of new ways to detect and measure gerrymandering and its potential effects on election. The students in this project will be provided with a survey of these results and be guided toward a deeper understanding of the core ideas and techniques.

Students will then choose a technique or two and apply them to election data to help develop and understanding of the state of redistricting in Michigan and potentially other states. Part of this project will be to create an interactive website which will include visualizations of the results of the mathematical gerrymandering measurement techniques.

Prerequisites: Coding experience