**CARTOGRAMS IN PYTHON**

**BY LUKE HALES**

[Draft]

Python is a powerful tool in which many data processing operations can be undertaken, including on geospatial data. Despite this, there is no standardised way of creating cartograms using the platform. While this can theoretically be accomplished with the combination of geospatial and polygonal Python libraries such as Shapely, GeoPandas and Cartopy, this can become complex to the average user. This paper takes into consideration the process and algorithms of creating cartograms, the practical applications this library could provide, and the compatibility of relevant Python libraries in order to reach a conclusion of how best to design a viable cartogram library. There are a multitude of ways in which cartograms may be drawn, each of which has its own unique set of mathematics that comes with it. Therefore, it is imperative that appropriate methods are to be used in this library.