

## Project Summary

Paul Erdos in the later years of his life, formed an enormous network of co and joint authors with whom he published mathematical articles. So vast was his network and its influence in the mathematical society, that studies have been made in interest of finding out how to analyze this group of 511 mathematicians and determining how other mathematicians would navigate the network to determine which influential characters would be best approached for joint authorship for a particular study. This short project was one such attempt to visualize the network and establish a metric with which to measure the level of influence any mathematician had in Erdos' joint author network.

The network was built and finalized under the following parameters:

- A node is a joint author of Erdos
- Size of the node is determined by how many articles Erdos and this mathematician published together.
- Influence (deeper color) is calculated by eigenvector centrality for connections. The more connected the node is to other well connected nodes, the more influential that node is.

Under these conditions, we were able to visualize Erdos' network and determine a metric for influence within the network.