# CS 545: Data & Information Visualization
# Final Project Proposal

Group 6: Nathan Chapman, Nick Haviland, Gihane Ndjeuha, Andrew Struthers, Kollin Trujillo

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## Description

We are interested in network systems and their graph visualizations. Specifically we will be investigating the relationships between how users ask, answer, and comment on other user's posts on stackoverflow.com. Using data from the Stanford Network Analysis Project (SNAP), we aim to specifically investigate emergent phenomena such as the existence of relatively small groups of users that all are active on each other's posts (i.e. finding cliques), and the time-dependance of users' activity on the platform.

## Software

Potential software that could use falls into two categories: analysis and visualization.

- The analysis of the network data could be done using
  - Python
  - the network analysis package *NetworkX*
  - the *Compressed Sparse Graph Routines* in scipy
  - the *Open Graph algorithms and Data Framework* (OGDF)
  - the associated Python bindings package
- Visualization: The visualization of the networks will be done using the Plotly package for network graphs in Python.
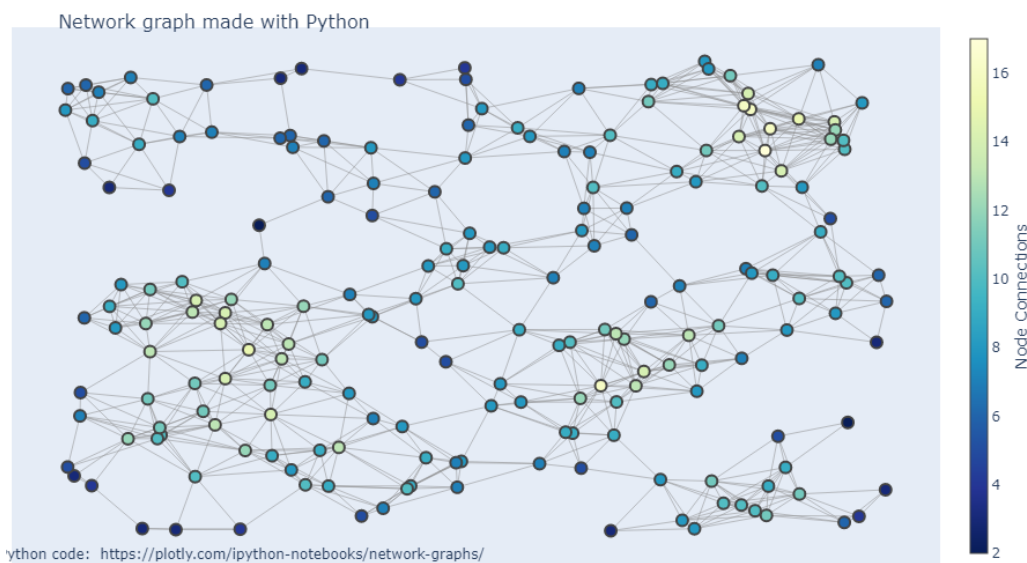
## Example Visualization



Figure 1: An example visualization of a network using Plotly