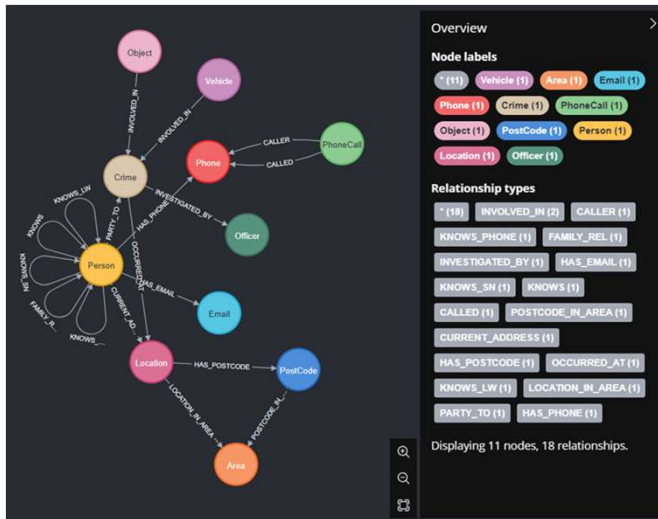


The Ditchley Foundation - Bridging Divides with Graph Networks

# Neo4j and Uniting People Involved with the Green Transition

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A schematic showing the types of nodes and relationships in a database

## Overview of the Data Fellowship

At the Ditchley Foundation, I was first able to meet and work with a lot of other people interested in data analysis, many of whom originated from other universities or even areas of the world. Then, I was introduced to the three strands I would be working on during the summer: Quants, Existing Networks, and Networks Expansion. Both of the networks strands allowed me to gain familiarity with various aspects of people the foundation was already in contact with and help the organization in locating additional people that Ditchley should contact in the future. The quants strand dealt with analysis of the types of people already present in the Ditchley Foundation's neo4j network.

## Data Analysis

While working with the quants strand, I was tasked with looking into the geographical information of the people that were currently present in the foundation's neo4j database. I first, however, had to start by working with some sample data (shown above) to fully understand how to use the coding language. In addition, working on the networks expansion strand gave me the chance to construct my own neo4j database. This was based on twitter data of a collection of important people involved with the green transition here in the UK. I was then tasked with taking all the twitter users they were following to create a product that might help the Ditchley Foundation know who to interact with in the future.

## Findings

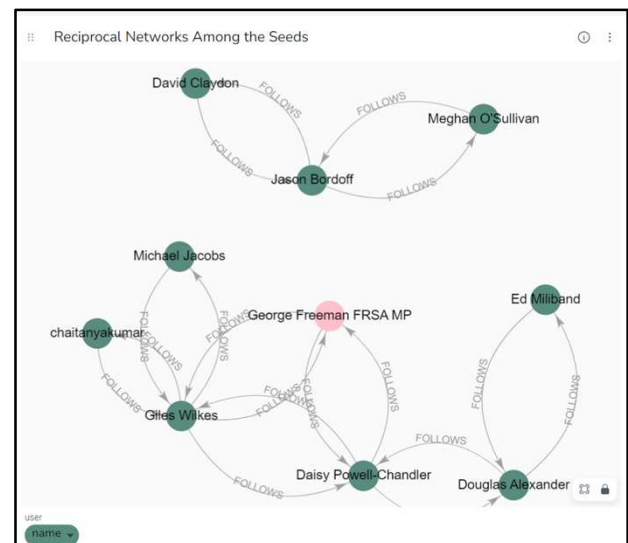
- In working with the quants data, my team and I discovered that there was a large bias towards people associated with the United Kingdom. We then showcased some of the most undervalued locations in the database for the foundation to improve outreach to.

- In searching through the data from my newly constructed neo4j twitter database, I was able to eliminate some of the more highly followed people (such as President Barack Obama) in order to identify who in the dataset seemed to be underrated. I was then able to create a custom dashboard which allowed the foundation to filter according to their own needs.

## Key Skills Learnt

One of the most crucial skills I developed during my time with the Ditchley Foundation was how to showcase findings of data analysis. While I may have known what exactly a query of the database was showing, that information would remain useless to the less code-savvy members of the team unless I could showcase it in a way that was intuitive and easy to read. Throughout the data fellowship, I was able to reformat tables and charts to make the outputs and the effects easy to follow without the effects shown being exaggerated in any capacity. Furthermore, I was able to introduce elements of interactivity that allowed those unfamiliar with how to tweak the code to still be able to have a say in the outputs produced.

In addition, I learned how to work well in a team with others and feel confident leading in my aspects of a project. Throughout my time at the Ditchley Foundation, I worked in three teams, one consisting of only two people (including myself), one consisting of four people, and one consisting of six people. Learning how to stand up for my ideas as well as listen to other people's ideas looked very different in each of these settings, and I found navigating this to be very beneficial to my professional development. I know I will be able to apply these skills in future professional settings.



Reciprocal relationships between people associated with the green transition