

# Password Universe Visualiser

**Georgi Damyanov**  
**Supervisor: Shujin Li**

## **Password Universe**

Password Universe allows anyone to visualise any type of patterns from any database that can consist of any words in any language.

The database entries are represented by dots that form circles. These circles have radius from the center based on the edit distance from the user entered keyword. Graph is sorted alphabetically starting from 0-9, a-z and symbols.



## **Usage**

The project is mainly targeted towards password analysts, researchers, security developers etc. allowing them to easily visualise any patterns. In my case I am using hacked passwords that have been compromised and uploaded online for research purposes. This way people can see how common a password they use is to a hacked password.

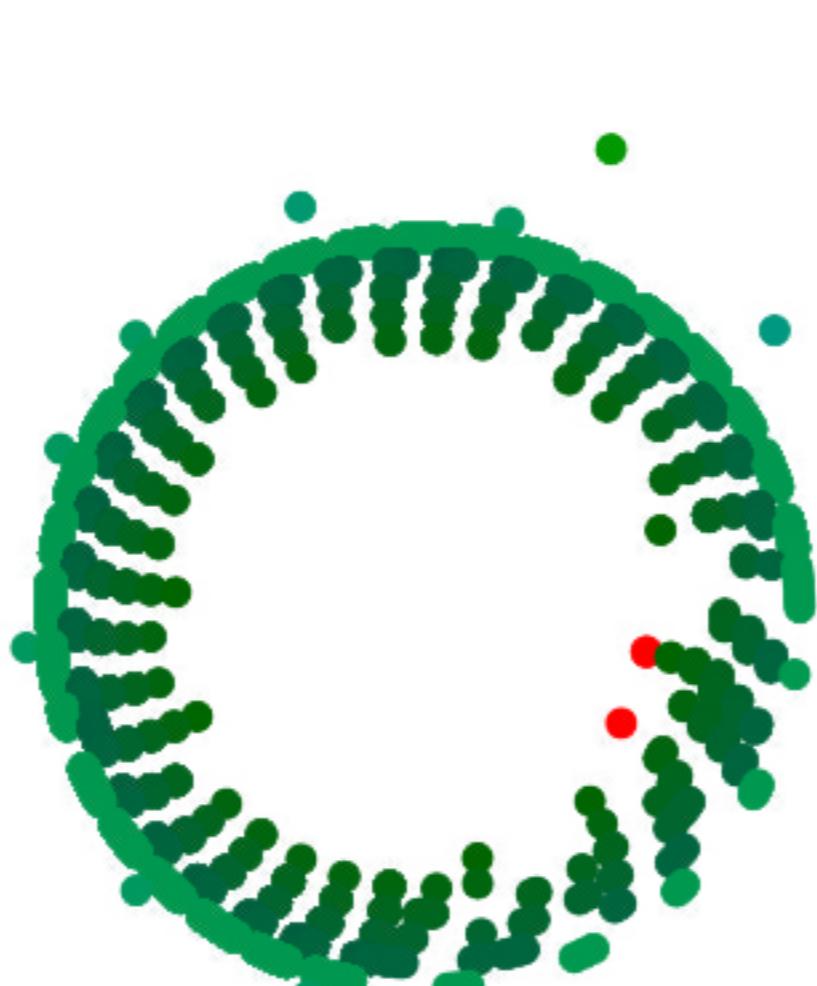
## **Examples of our visualiser**

Below you will see 2 examples of the visualiser. I am using the same database but rendering 2 different keywords by my choice. The graphs are generated by comparing my keyword to the entries in the database. This generates us 2 different patterns. The closer the dots are to the center, the shorter the edit distance is. Furthermore this is showcased through the color red which appears at the shortest edit distances.

**Diagram 1**



**Diagram 2**



**Combined**

