Email Visualization

INTRODUCTION

Word History is a time based visualization that depicts the trend of a word or phrase in email over time. You can type in words or phrases and see a graph depicting the frequency of that word or phrase occurring in your emails over time. Also, the visualization finds related words and phrases in the same or similar emails. You can also choose to compare multiple chosen words without related words.

This visualization helps see what topics, names, or words you have seen in your email and in what time they were used more frequently or less frequently. In essence, it attempts to not only provide a way to make the standard search capability of email more visual but also archive past email in a meaningful, interactive way.

PREVIOUS WORKS

The Name Voyager is one of Martin Wattenburg’s creative works. It visualizes a century of baby name trends. You type in a name and in turn see a graph that can be separated by boys and girl name lists. It overlays names with the same beginnings so that you can also spot trends in related or similar sounding names. Each also has a ranking so that you can understand how the name stacks up against others that year.

The concepts taken from the Name Voyager visualization include the basis of displaying data over time, the comparison overlay, and related search.

Text Cloud is similar to a tag cloud. It is a visual depiction of the word content in a given text. The size of each word corresponds to the frequency of that word in the text. Often, the color and text are interactive and clicking on it will lead to the sentences of where that word was found in the text.
The concepts taken from Text Could include the emphasis on the frequency of a word in a given text, interactive links leading to the text source, size of text, and the variety of different colors.

VISUALIZATION

Horizontal Axis
The x-axis displays time, either by day, month, or year. Month is the preferred and default view, and most likely the view that has the most interesting trends.

Vertical Axis
The y-axis quantifies how many emails contain that word.
**Points**
When clicking on a particular point on the graph, it leads you to see the list of emails in that given time (month, day, or year) so you can explore the emails more in depth. It also highlights the word to show you where it appears in the emails.

**Text Size**
A redundant measure of the number of emails containing that word.

**Color**
The colors distinct each phrase or word looked at. In the standard one term search, the deepness of the color represents how close of the related words are to the word being compared against. In the multiple term search, the colors again are distinct but this time have no relation to one another.