Data Comets

Aristotelis Sigiouan Leventidis, Berk Can Gurel, David Saffo, Twinke Jain

Fig. 1. Data Comets visualization

Abstract— Abstract

Index Terms—Drone, d3, map overlay

1 Introduction

Brief introduction to our project and a short explanation of the paper sections.

2 Related Work

In this section we will talk about previous work done about drone or object trajectories. We will discuss how those papers or projects are relevant to our work and what are their limitations.

3 Process

In this section we will explain our implementation process in subsections.

3.1 Dataset

We will talk about the dataset we use for this project. What is the source of the data? How many examples and dimension are there? How complete is the data? Is the dataset reliable?

3.2 Data Filtering and Preprocessing

We will describe the operations we apply to the raw data in order to get preprocessed data.

3.3 Map Embeddings

How do we retrieve the map and how do we embed it to the background? Is the map interactive?

- *Aristotelis Sigiouan Leventidis, Northeastern University, Email: leventidis.a@husky.neu.edu*
- *Berk Can Gurel, Northeastern University, Email: gurel.b@husky.neu.edu*
- *David Saffo, Northeastern University, Email: saffo.d@husky.neu.edu*
- *Twinkle Jain, Northeastern University, Email: jain.t@husky.neu.edu*

3.4 Visualizing Trajectories

We will describe our algorithms to visualize the drone trajectories over the map. We will explain how the trajectories and the trails are calculated and plotted.

3.5 Plotting Charts and Graphs

We will talk about how to plot the charts and graphs for our interface.

3.6 Brushing and Linking

How interactive the visualization is? How can we make selections? Which components are linked? How the linking is achieved?

4 Design

In this section we will explain our design choices in subsections.

4.1 Encodings

How many attributes are encoded? Which marks and channels did we use and why?

4.2 Color and Shape Choices

How did we choose which color scales to use and why? How did we decide on the shape and size of the trajectory and the trail?

4.3 Data&Ink Redundancy

What did we do to ensure that our visualization is easy to read and understand?

5 Discussion

In this section we will talk about our results and what we have achieved.

5.1 Challenges and Limitations

Which parts of the projects were challenging for us? Which functions we have failed to implement?

5.2 Future Work

What are the plans for the future of this project? What can be further improved?

6 Conclusion

In the conclusion, we will give a brief summary of the paper and our findings.

7 References