

Analysis of Trending Technologies in the Field of Aerospace

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Problem

- Predict the Trending technologies in the field of Aerospace and Aviation by using the Tweets and Facebook Updates of Federal Agencies , Corporate Research & Development wings and University Labs.
- Additionally ,method to depict the connections between companies talking about or working on the similar technologies , the corollary will show the potential options available.

Approach

1. Data Collection – Collecting the Tweets and Facebook Updates of the following
 - I. Government Agencies
 - II. Research Labs.
 - III. Aerospace Tech. Companies.
2. Classifier with the list of Pre-defined terminologies in the field of Avionics.
3. Tokenization of the collected Data and labeling them based on the classifier.
4. Plot the distribution of the trending technologies and the corresponding people who are involved in it.

Eg. Next Gen Engines -> Classified under Engines -> Count of people talking about Engines.
5. Creating clusters for every technology involving the Regulation Agencies, Manufactures and Research companies.

Eg. Smart Cockpit System –Federal Avionics Agency (FAA)- Boeing – MIT LABs
Touch Screen Cockpit System – FAA – Airbus - Honeywell.
Being competitors, both Airbus and Boeing can benefit from such a Analysis.

Data

Tweets and Facebook Page updates of

1. Federal Aviation Administration
2. European Aviation Safety Agency
3. Airbus
4. Boeing
5. Lockheed Martin
6. Honeywell Aerospace
7. GE
8. Rockwell Collins
9. Thales
10. MIT Labs.

2500 Tweets and Facebook Page Updates each.

Apart from the content of the Tweet/Facebook Update , the involvement[mention] of other contributors will be a major role while creating the clusters.

Terminologies in the field of Avionics will be manually stored in a file to aid the classification algorithm.

Timeline

- Data Collection – 30th October
- Classification - 9th November
- Trend Analysis – 11th November
- Clustering – 18th November
- Validation – 22nd November