# **Group 23: Twitter Sentiment Analysis**

#### Key Ideas:

- Machine Learning on Big Data
- 10 sentiments
- **31,130,257** (english) Tweets
- 3.01 GB

#### **Key Tasks:**

- Preprocessing of Tweets
- Hashing TF and IDF
- Training a Deep Neural Network
  Model for Classification
- K-fold Cross Validation
- Grid Search/Hyperparameter Tuning

#### Tools and Technologies Used:

- Azure Databricks
- Azure SQL Database Warehouse
- Apache Spark with Scala
- Spark MLLib (Machine Learning)
- Spark SQL (Data Management)
- Tableau (Data Visualization)





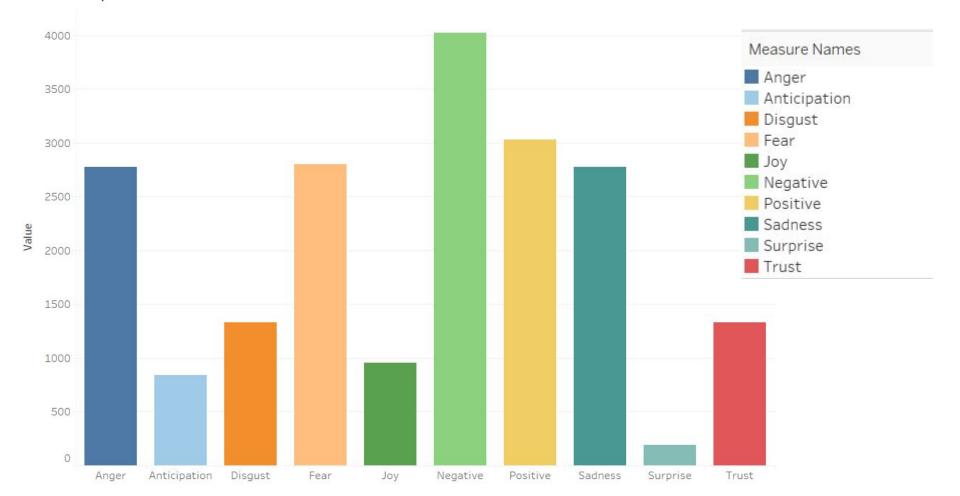




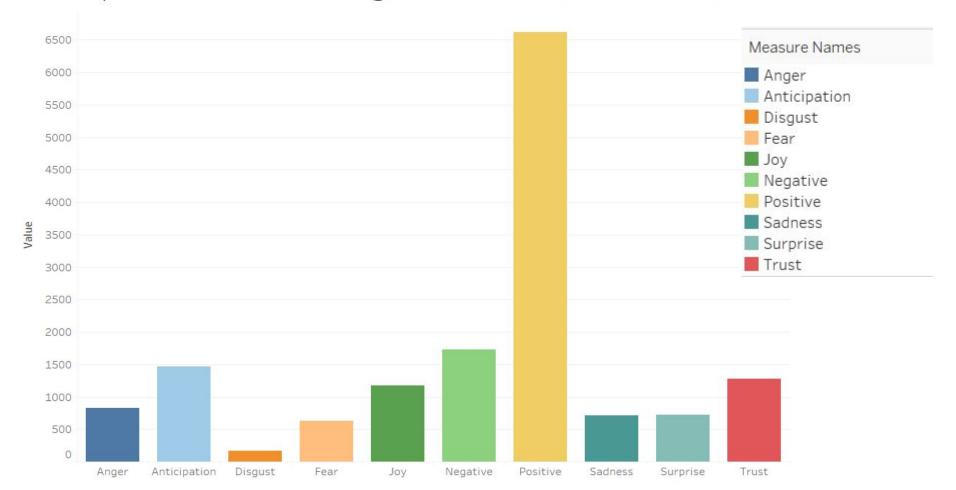


Azure Databricks

Example 1: Number of **#brexit** Tweets for each Sentiment



#### Example 2: Number of **#got** Tweets for each Sentiment



### Example 1: Word Cloud for #brexit Tweets



## Example 2: Word Cloud for **#got** Tweets

