

Tweet based Sentiment Analysis regarding ChatGPT

Business and Project Management course project

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Introduction



Negative



Neutral



Positive



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- Tweets collection
- Text preprocessing
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Tweets collection

- Snsccape library
- Since 1 December 2022 to 7 February 2023
- 2000 tweets a day

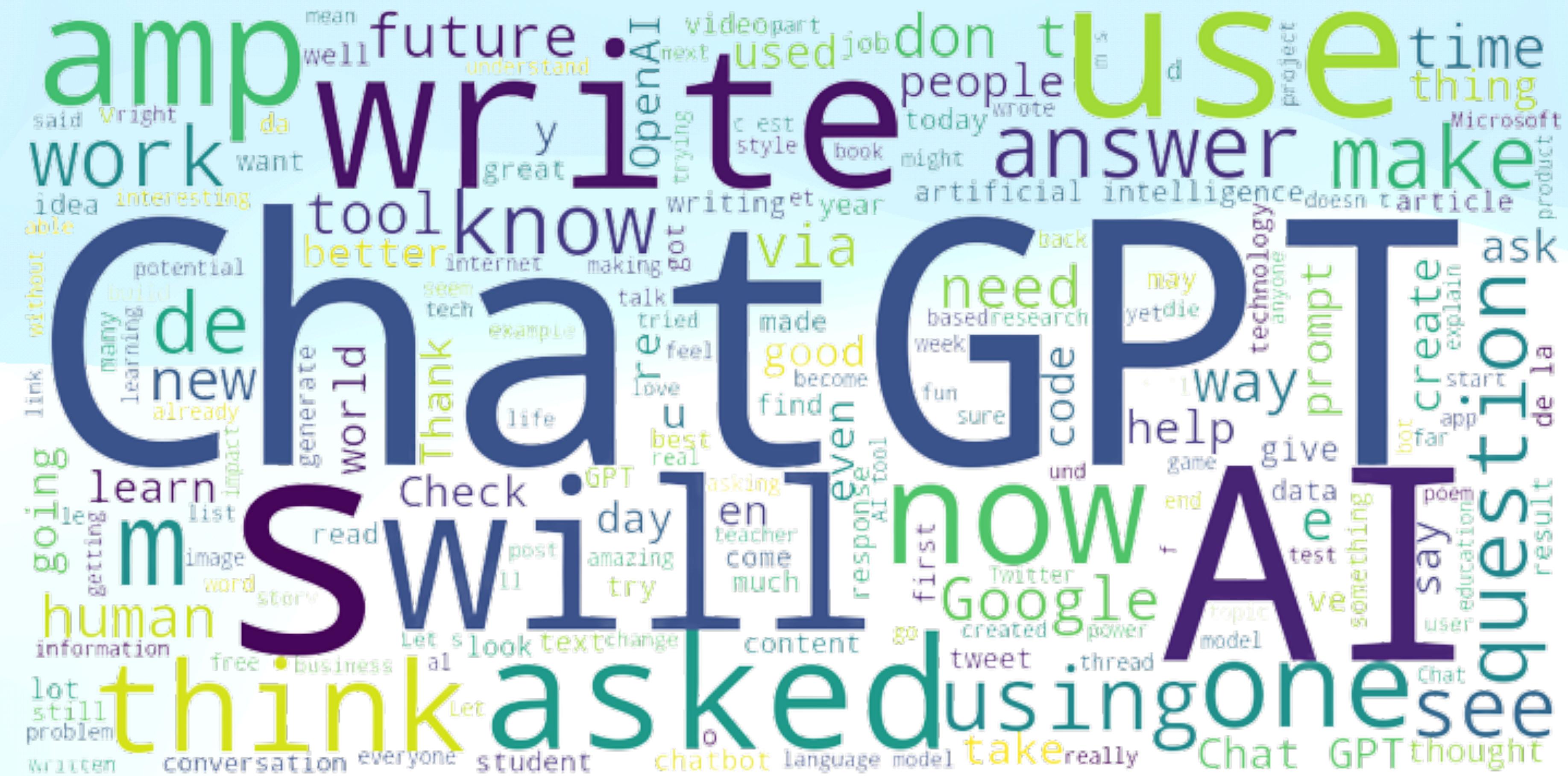
	Datetime	Tweet Id	Text	Username
0	2022-11-30 23:56:59+00:00	1598103832080584704	Twitterのフォロワーを増やしたい。最低でも1万人。 \n#ChatGPT https://t.co/...	1024pixels1
1	2022-11-30 23:56:04+00:00	1598103601507102720	Overall, using AI to create art can expand the...	charis_ai
2	2022-11-30 23:56:02+00:00	1598103593634369536	Este prompt fue creado con #ChatGPT el nuevo m...	alarcon7a
3	2022-11-30 23:54:08+00:00	1598103115060084736	Just played around with OpenAI's new #ChatGPT ...	anthonypak
4	2022-11-30 23:51:34+00:00	1598102468243599361	I asked #ChatGPT to write me a story about Sov...	emargusity

Text preprocessing

- Urls
- Handlers
- Hashtags
- Multiple spaces
- Punctuation
- Non ASCII characters

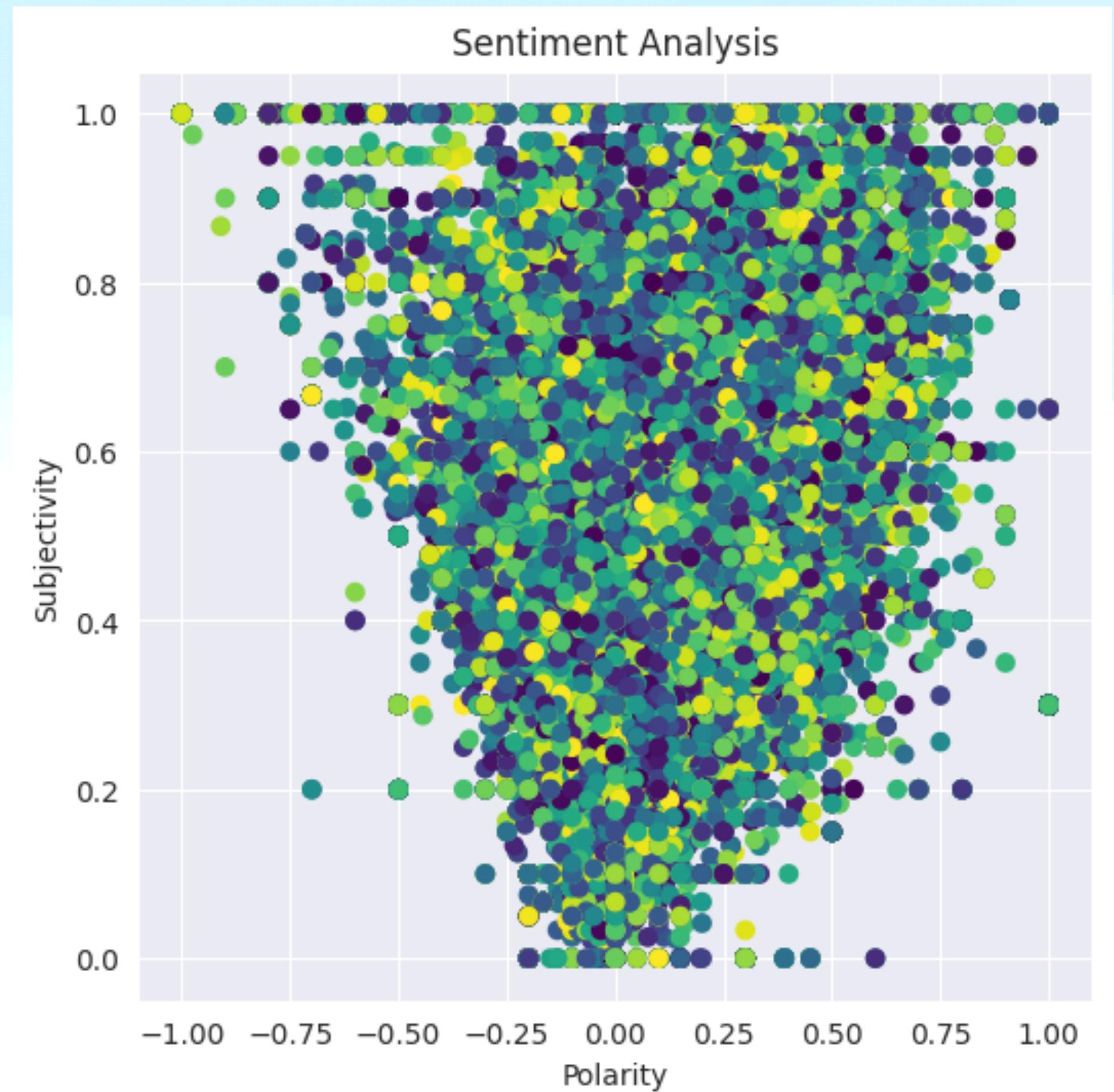
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4	2022-11-30 23:51:34+00:00	1598102468243599361	I asked to write me a story about Sova and Jet...	emargusity

WordCloud creation

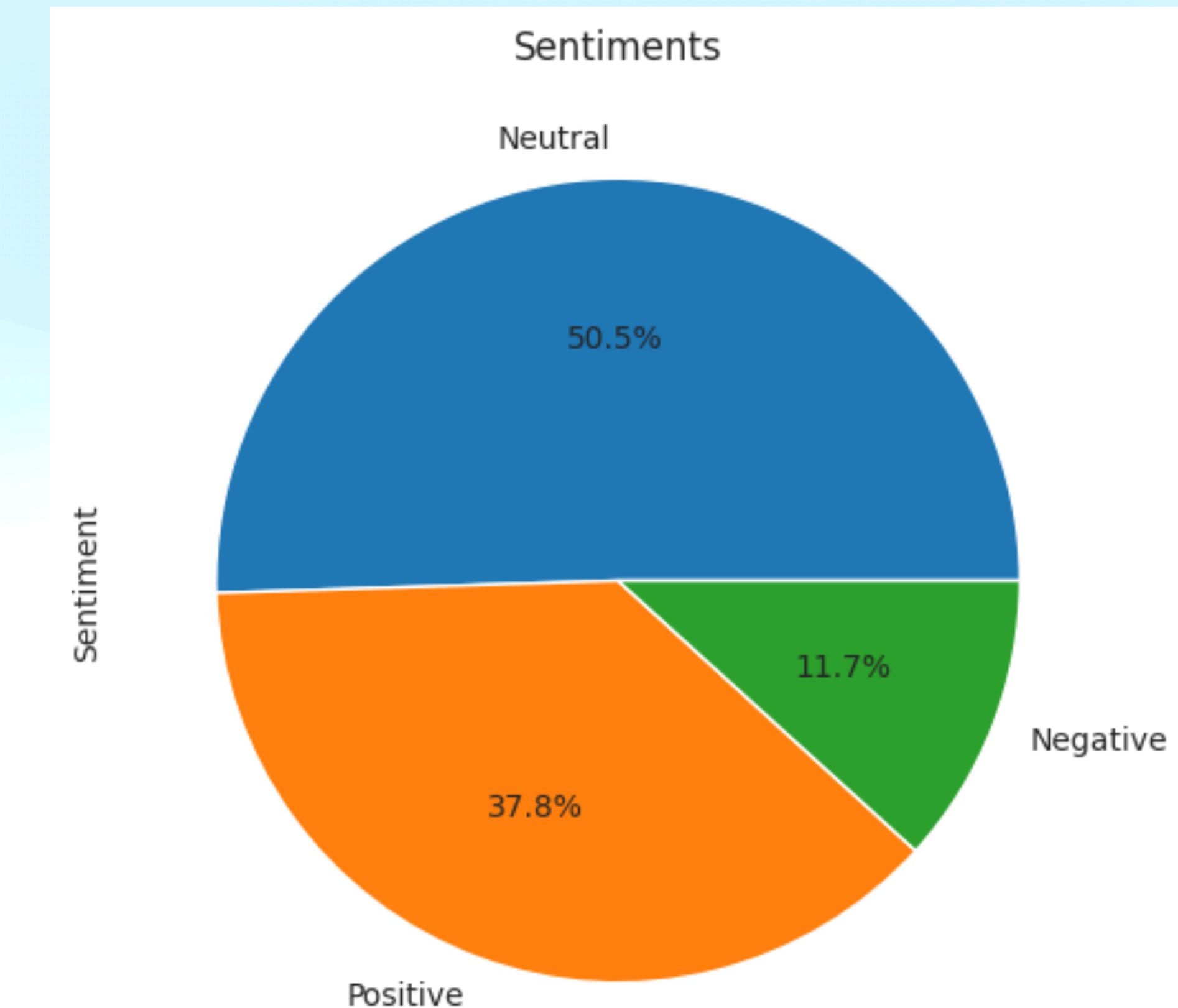
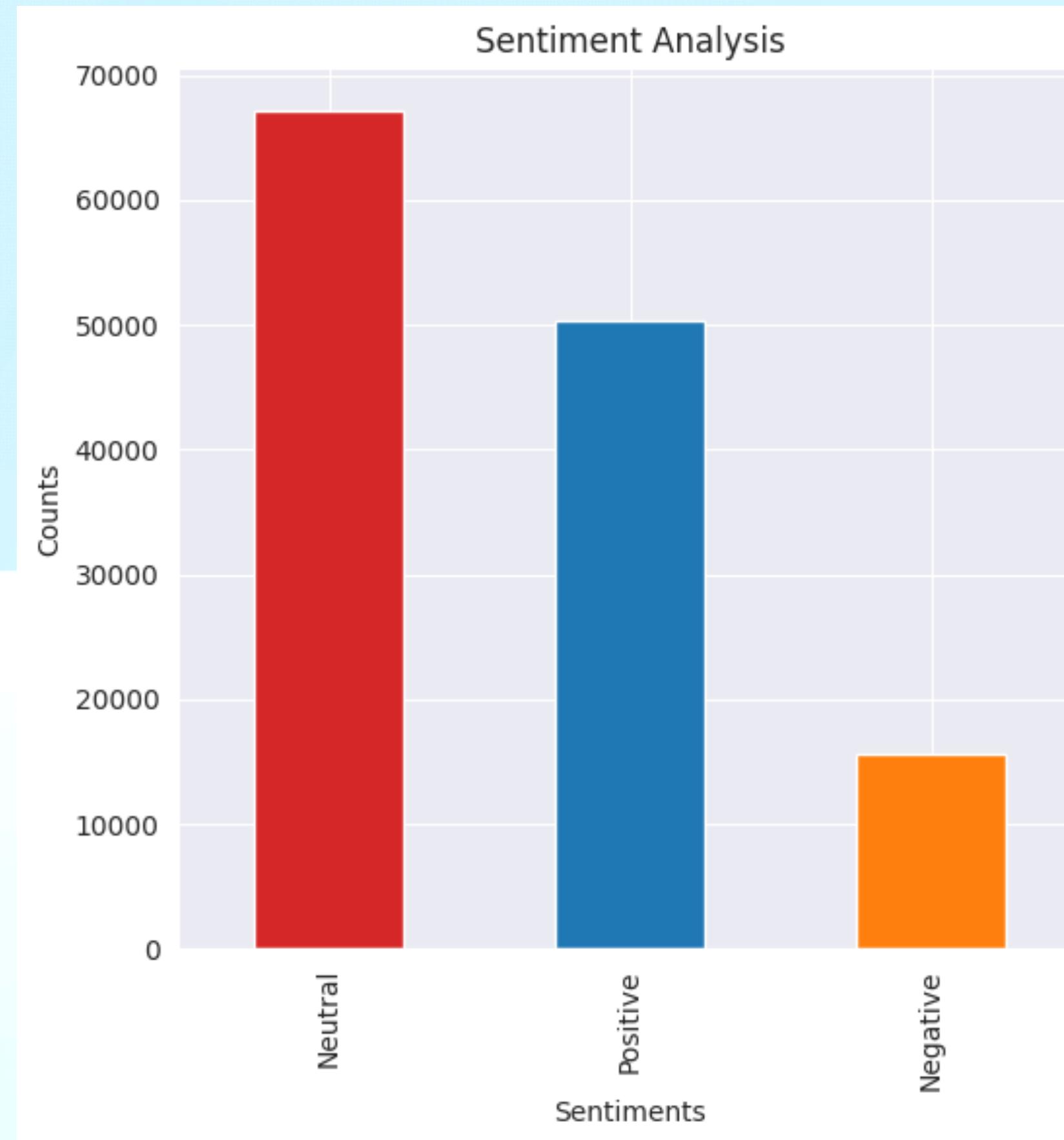


Sentiment Analysis - Text Blob

- Python library for processing textual data based on machine learning
- Subjectivity between 0 and 1
- Polarity between -1 and 1

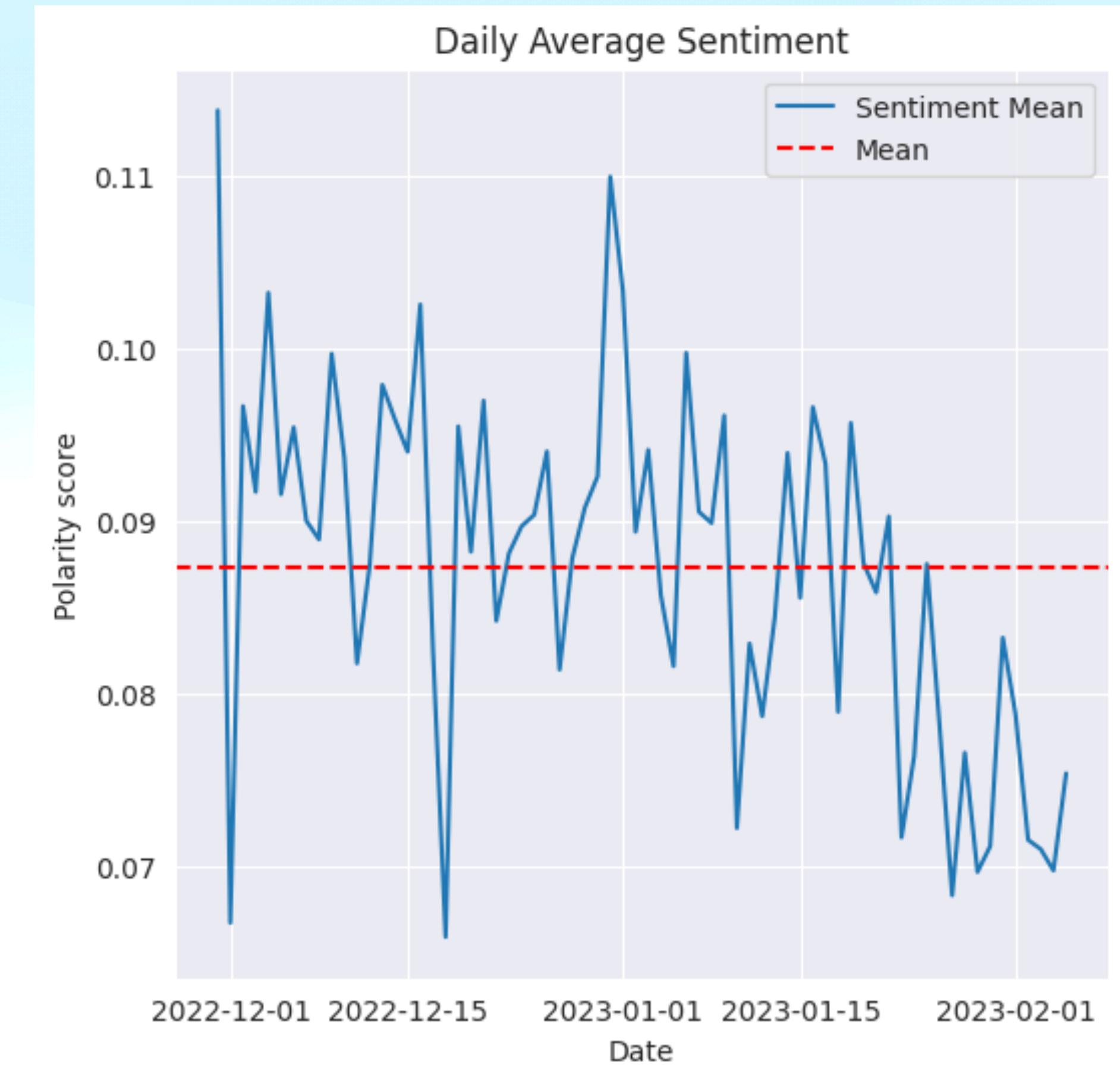


Sentiment Analysis - Text Blob



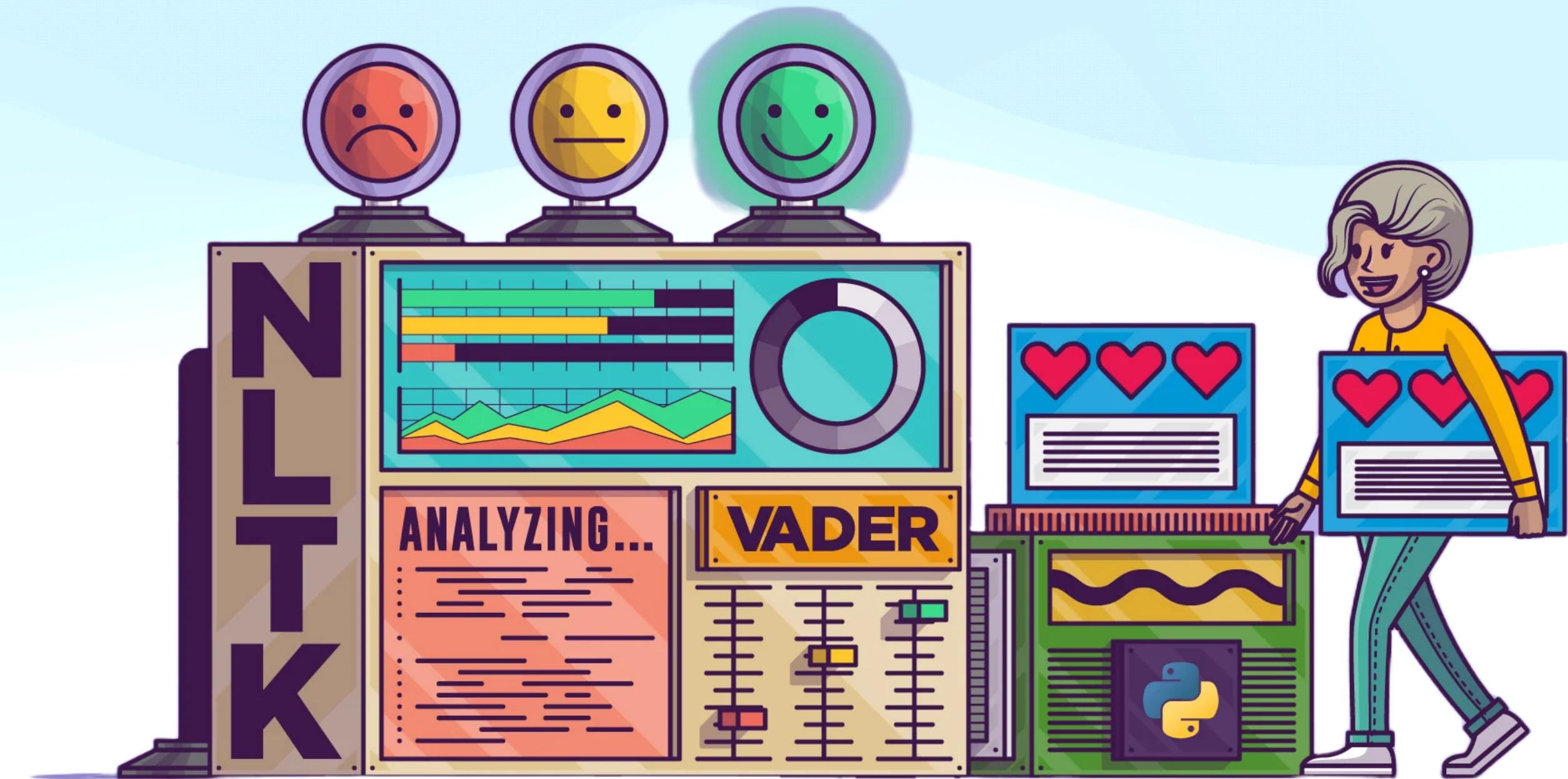
Sentiment Analysis - Text Blob

- High positive sentiment after release
- Descending sentiment over time

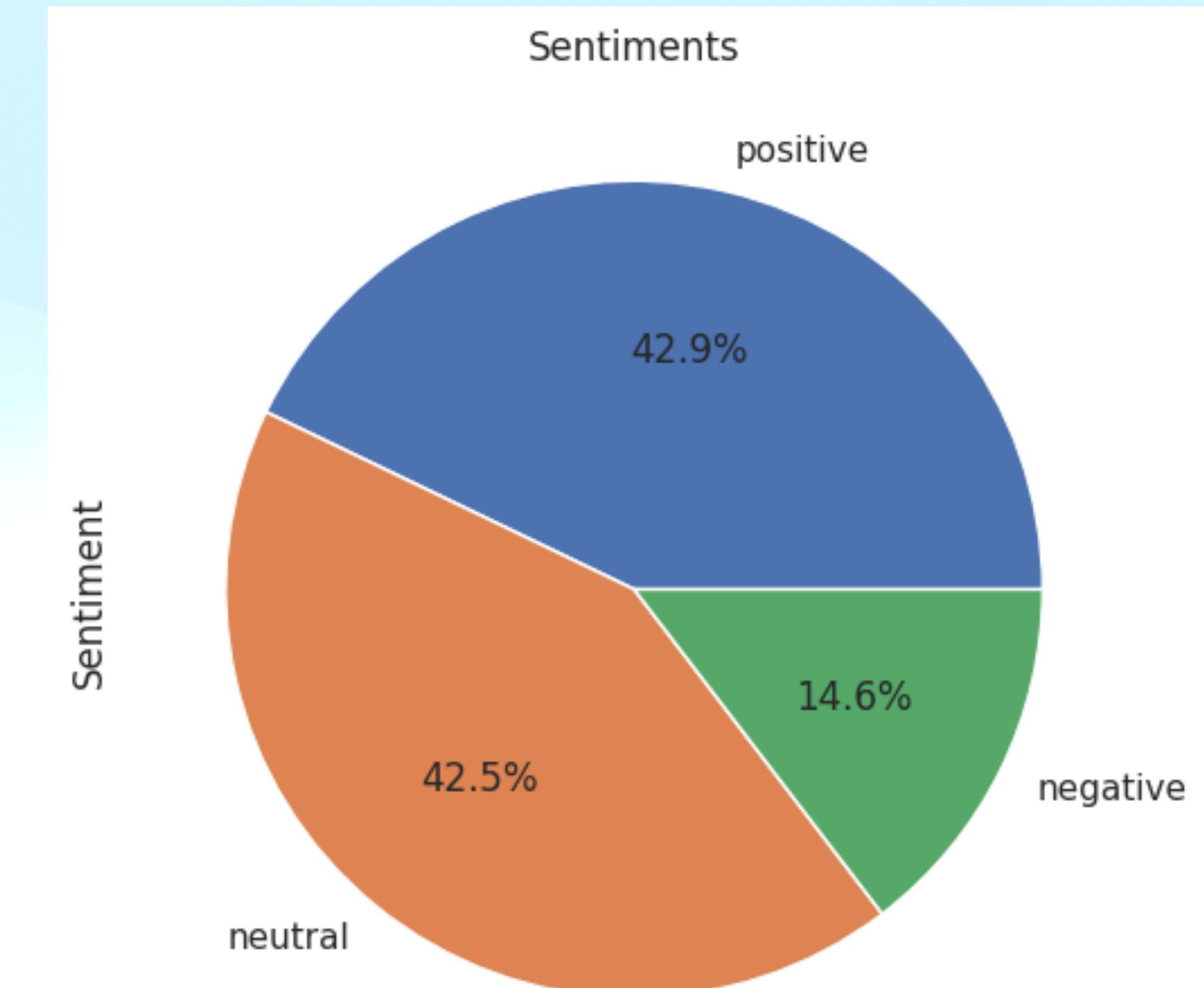
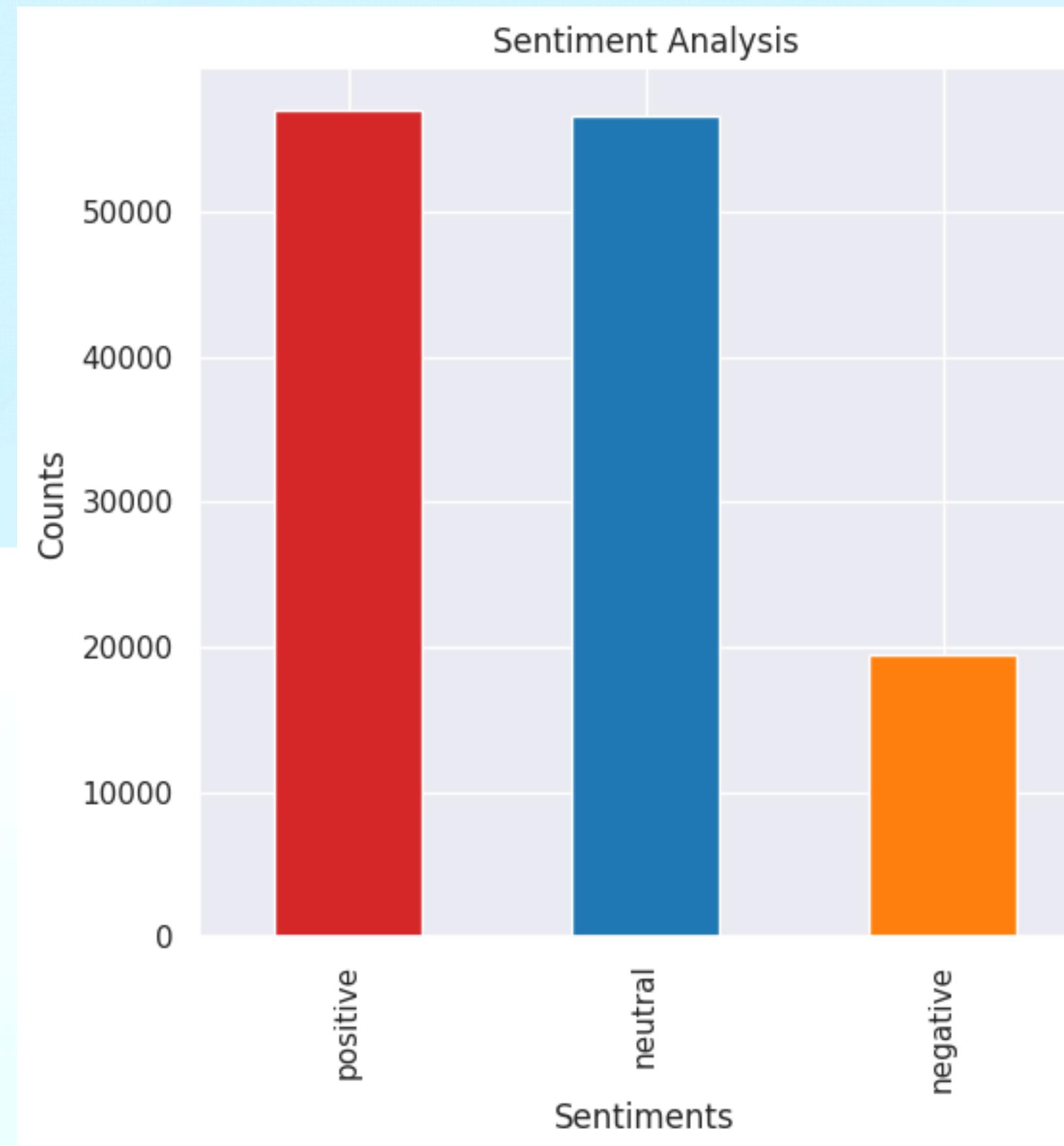


Sentiment Analysis - vaderSentiment

- Python library for processing textual data based on words scores
- Pos, neu, neg scores
- Compound score between -1 and 1



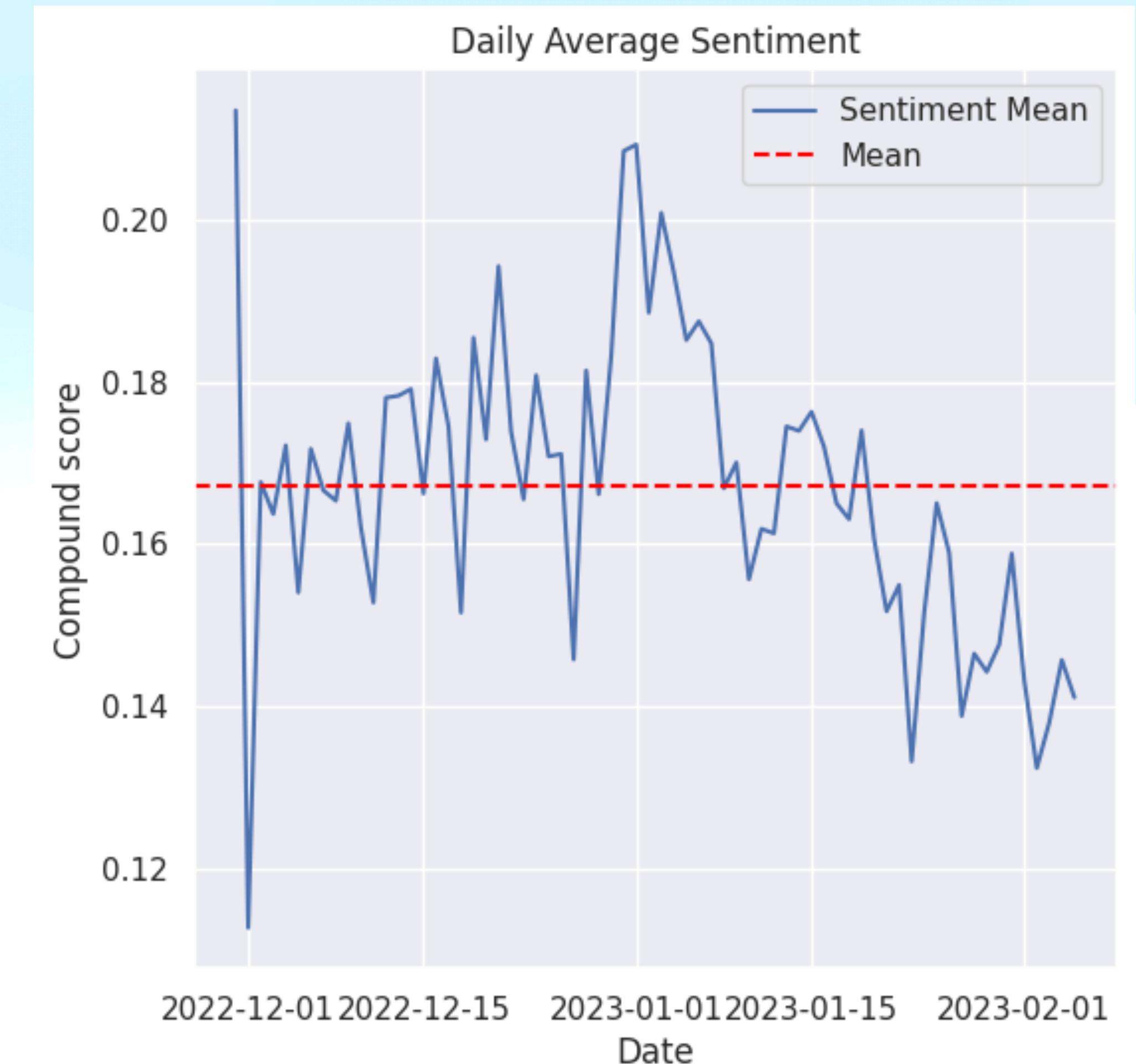
Sentiment Analysis - vaderSentiment



Sentiment Analysis - vaderSentiment

Similar results to Text Blob:

- High positive sentiment after release
- Descending sentiment over time



Sentiment Analysis - Results

- General positive sentiment about ChatGPT
- Descending positive sentiment during time caused by technical factors and critics



Competition Analysis

Microsoft

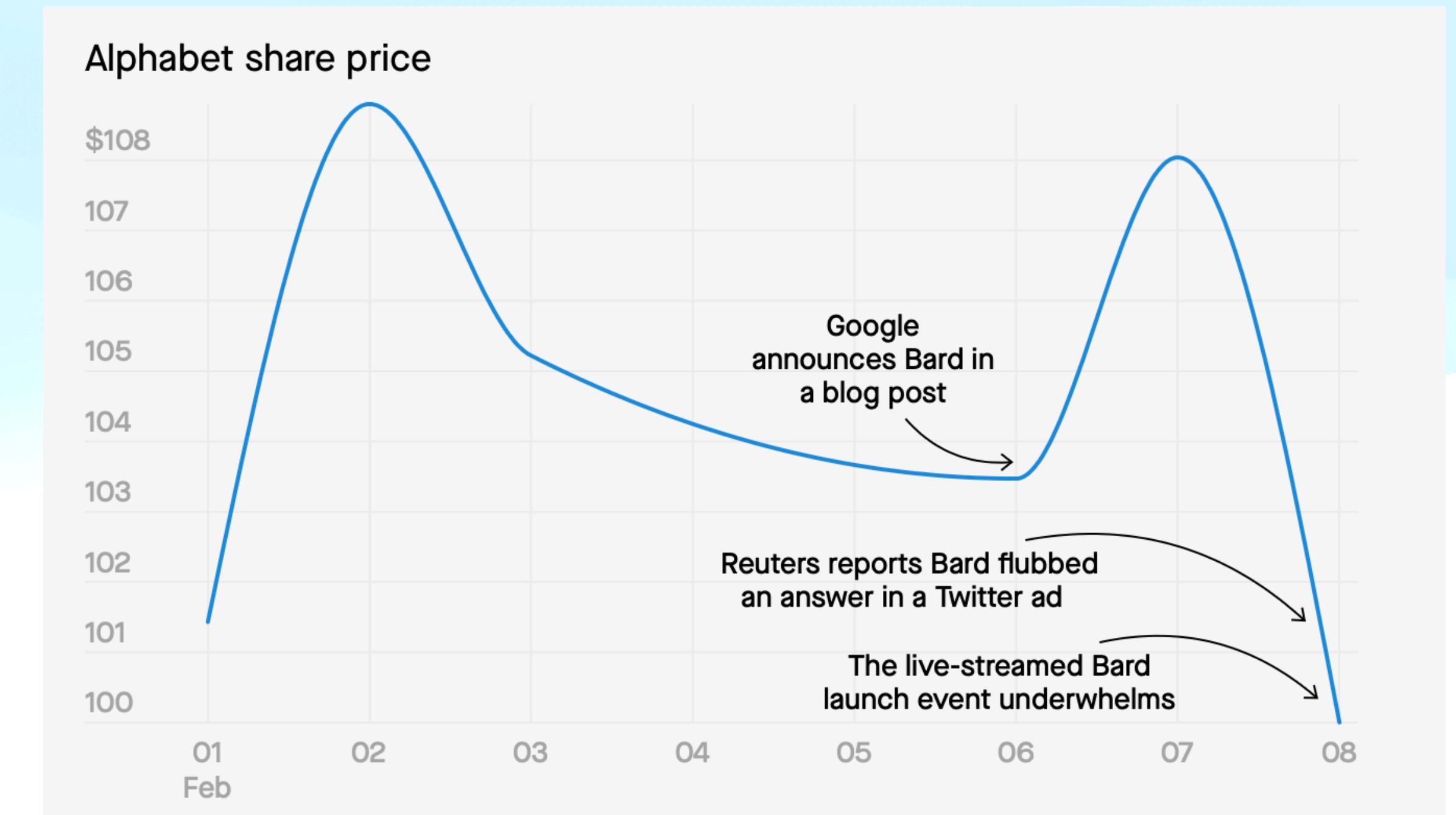
- \$1 billion investment in 2019
- About \$10 billion investment recently
- Increase its investments to assist OpenAI's research
- Integration of OpenAI technologies in Microsoft applications



Competition Analysis

Google

- Bard
- LaMDA technology
- Possible rush and presentation error costing \$100 billion



References

- Hutto, C.J. & Gilbert, E.E. (2014). VADER: A Parsimonious Rule-based Model for Sentiment Analysis of Social Media Text. Eighth International Conference on Weblogs and Social Media (ICWSM-14). Ann Arbor, MI, June 2014.
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- <https://www.theverge.com/2023/1/23/23567448/microsoft-openai-partnership-extension- ai>
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