**News Summarization using LLM**

In this work, we generate news summary using Large Language Model and test whether the generated summary is effective in comparison to original one.

**Dataset:** We use BBC new dataset as obtained from Kaggle (<https://www.kaggle.com/datase​t​s/​pariza/​bbc-news-summary/>). It contains news articles from different categories namely business, entertainment, politics, sport and tech. This dataset also contains summary. 10 news from business category have been used.

**Model:** We use GPT-3.5 Turbo model for applying Large Language Model on the dataset for summary generation. The settings used are as follows.

model="gpt-3.5-turbo",

messages=messages,

temperature=0.5,

max\_tokens=1000,

top\_p=1.0,

frequency\_penalty=0.0,

presence\_penalty=0.0

**Results:** The summaries generated have been compared with original summaries using ROGUE score.

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| --- | --- | --- | --- | --- |
| **Summary for News at Serial Number** | **rouge1** | **rouge2** | **rougeL** | **rougeLsum** |
| 1 | 0.03 | 0.0 | 0.03 | 0.03 |
| 2 | 0.0375 | 0.0 | 0.0375 | 0.0375 |
| 3 | 0.035 | 0.0 | 0.035 | 0.035 |
| 4 | 0.0425 | 0.0 | 0.0425 | 0.0425 |
| 5 | 0.04 | 0.0 | 0.04 | 0.04 |
| 6 | 0.0475 | 0.0 | 0.0475 | 0.0475 |
| 7 | 0.055 | 0.0 | 0.055 | 0.055 |
| 8 | 0.055 | 0.0 | 0.055 | 0.055 |
| 9 | 0.065 | 0.0 | 0.065 | 0.065 |
| 10 | 0.06 | 0.0 | 0.06 | 0.06 |