NLP Project Ideas

1. ) Leveraging NLP techniques to detect and interpret gravitational wave events by analyzing scientific literature and metadata from LIGO. The project aims to classify events, extract insights, and explore symbolic sequence modeling for wave signals. This approach bridges text mining with astrophysical discovery automation.
2. ) Develop a neural network model inspired by the interaction between Broca's and Wernicke's areas to specialize in mathematical text generation, particularly in combinatorics. The model will focus on language comprehension and problem-solving to create unique mathematical explanations.
3. ) Build a chatbot that not only generates text responses but also learns and improves over time through user interactions. The project aims to explore new methods for integrating Reinforcement Learning with language models, potentially leading to novel insights and a research paper.