1. **Introduction**

Chat-GPT is a sibling of InstructGPT, which is specialized in providing elaborate answers based on any questions. This model utilizes a machine learning technique known as Reinforcement Learning form Human Feedback (RLHF).

(https://openai.com/blog/chatgpt)

On November 30th, 2022, an AI research and deployment company, OpenAI launched Chat-GPT, an extension of GPT-3 designed to engage in natural language conversations. It has been able to significantly attract the attention of the whole world for its natural and meaningful conversations with response to its user. This AI application has fundamentally changed the expectation and possibilities of artificial intelligence in many communities like software developers, writers, and students.

(We need to talk about ChatGPT: the future of AI and higher education)

1. **Development of Chat-GPT**

Chat-GPT is a large language model which is based on deep learning using a type of neural network called transformer. Deep learning is a subset of machine learning which makes use of its vast neural network to learn for the available data and provides its output or predictions. Large amount of text data is processed by Chat-GPT’s by utilizing attention mechanism of transformer architecture. Deep learning technique can understand the relationship or pattern between text and able to predict the required text making this AI application able to respond to the questions in human natural language.

(Deep learning in chat-GPT- a survey)

The technique of machine learning known as Deep learning is inspired from the structure and function of neural networks of human brain. It classifies various layers of neural networks, and each layer creates and represents a complex set of data. This method requires lot of computing power and large set of data.

(Deep learning in chat-GPT- a survey)