

# **The Impact of Online and Offline Large Language Models From Code Creation to Healthcare: Revolutionizing Applications**

**Al Mubtasim, Debabrata Basak Brata, Ibrahim Khalil Ullah Midul  
and Md. Daud Ibrahim**

Undergraduate Student, Department of Computer Science  
American International University – Bangladesh  
Dhaka 1229, Bangladesh

22-49002-3@student.aiub.edu, [21-45946-3@student.aiub.edu](mailto:21-45946-3@student.aiub.edu),  
22-48301-3@student.aiub.edu,  
22-49760-3@student.aiub.edu

**Antik Saha Ankur**

Undergraduate Student, Department of Electrical  
and Electronic Engineering  
American International University –  
Bangladesh  
Dhaka 1229, Bangladesh  
20-42784-1@student.aiub.edu

**Md. Mortuza Ahmmed**

Associate Professor, Department of Mathematics  
American International University –  
Bangladesh  
[mortuza@aiub.edu](mailto:mortuza@aiub.edu)

## **Abstract**

Large Language Model (LLM) is one of the most revolutionary advancements of the modern era. Enhancing human-computer interaction by understanding human language, generating visuals, providing healthcare suggestions and many more. This study analyzes the current impact of both online and offline LLM on code creation, education, graphics designing, and healthcare. Based on an online survey and data from various sources indicate an increasing trend of LLM users, showing the use of LLM to complete tasks, and learn new things, additionally generative LLMs are mostly used for creating visuals for graphic designing, on the other hand, the usage of LLMs in healthcare is still low as most of the LLMs are not yet properly trained to provide correct diagnostics and treatment, while LLMs show significant importance, the number of negative impacts such as ethical concern, reduction of creativity, not properly understanding prompts and many more are also noticeable. The study presents a detailed elaboration on the effectiveness and the negative effects of the usage of large language models in different fields, while providing an idea on if LLM will take over people's jobs or help to improve in the job fields.

## **Keywords**

Large Language Model, Healthcare, Coding, Technology and Artificial Intelligence

## **Biographies**

**Al Muhtasim** is an undergraduate student in Department of Computer Science and Engineering at American International University-Bangladesh, Dhaka, Bangladesh.

**Debabrata Basak Brata** is an undergraduate student in Department of Computer Science and Engineering at American International University-Bangladesh, Dhaka, Bangladesh.

**Ibrahim Khalil Ullah Midul** is an undergraduate student in Department of Computer Science and Engineering at American International University-Bangladesh, Dhaka, Bangladesh.

**Md. Daud Ibrahim** is an undergraduate student in Department of Computer Science and Engineering at American International University-Bangladesh, Dhaka, Bangladesh.

**Antik Saha Ankur** is an undergraduate student in Department of Electrical and Electronic Engineering at American International University-Bangladesh, Dhaka, Bangladesh.

**Md. Mortuza Ahmmed** is an Associate Professor of Department of Mathematics at American International University – Bangladesh. His research interests are mainly application based -- how to apply different statistical techniques in different sectors to perform more accurate and precise analyses as well as projection. His core academic research areas are public health, education and machine learning. One of his primary goals concerning students is to assist them with technical knowledge to turn their thoughts into successful outcomes to form a modern society.