



New User Interface for Blind

Why in News?

Recently, Experts from the [Indian Institute of Information Technology \(IIIT\), Allahabad](#), in collaboration with the **Karlsruhe Institute of Technology, Germany**, have created a **tool for blind and visually impaired individuals** to create and access chart images.

Key Points

- Blind people can **use this tool to search images** and **understand them with alternative texts (Alt-text) generated by Artificial Intelligence** based software.
- The research work discussed in a paper titled '**Alt4 Blind: A User Interface to Simplify Charts Alt-Text Creation**' is presented at an **international conference on computers helping people with special needs** in Linz, **Austria**.
 - **Alt-Text is manually crafted by authors**, but this approach frequently results in problems such as **oversimplification or overcomplexity**.
 - Emerging trends have seen the adoption of AI technology for the generation of Alt-Text.
 - The research presented an **online, open-source tool to enhance alt-text writing by using AI image retrieval**, making it more engaging.

Artificial Intelligence (AI)

- AI is defined as the **ability of machines** and systems to **acquire and apply knowledge and to carry out intelligent behaviour**.
 - The term "Artificial Intelligence" was **coined by John McCarthy**, an American computer scientist and cognitive scientist. He was one of the founders of the discipline of AI.
- It includes technologies like [machine learning](#), [Deep Learning](#), [Big Data](#), [Neural Networks](#), Computer vision, [Large Language Models](#) etc.
- The ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have the best chance of achieving a specific goal.

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