

# Delve in various AI tools and their real-world applications

NLP natural language processing this AI is used in

- chatbots: Dialogflow
- text analytics: google cloud natural language API

Computer vision tools

- Facial Recognition: Face++
- Image analysis: OpenCV used in health care to analyse MRI scans or X-rays.

## Benefits of AI Tools in education and problem solving

### Personalized learning:

One of the key benefits of AI is tailored education. where the student can have the AI help in strengthening the study styles and pinpoint any background weakness that the student has. The AI can improve the students' learning experiences. As an example in coding, instead asking people online which risks one to forms of cyberbullying, the student can use AI tools e.g. copilot and ChatGPT

AI can assist in research by identifying patterns and predicting outcomes. which helps in streamlining complex problem solving in various fields.

### Instance feedback:

With AI student can receive feedback on their work.

### Administrative support:

With the introduction of AI, the teacher is able to have an assistance. Task such as scheduling, grading or tracking student progress and seeing who is lacking behind can be delegated to the AI and give room for the teacher to work with the students in need.

# Challenges of AI tools in Education and problem solving

## privacy and data security

The use of AI has raised concerns about the privacy and security of student data. There must be an insurance that the sensitive information is protected breaches and authorised access.

## Over reliance on AI

This may hinder the development of critical thinking and problem-solving skills among students.

## Cost and implementation

Cost of running the AI models. Training of educators can cause pose significant barriers in widespread adoption.

## Reference

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