



Ministry of Higher Education and Scientific Research
University of Mohamed Boudiaf, Msila

Faculty of Mathematics and Computer Science
Department of Computer Science

1st year

Introduction to Artificial Intelligence

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April 2026



AI and Academic Creativity



AI as a Creativity Support Tool

Academic work is not only analytical. It also requires **creativity**:

- Generating research ideas
- Exploring new perspectives
- Communicating results effectively

AI tools can assist this process.

From Idea to Output

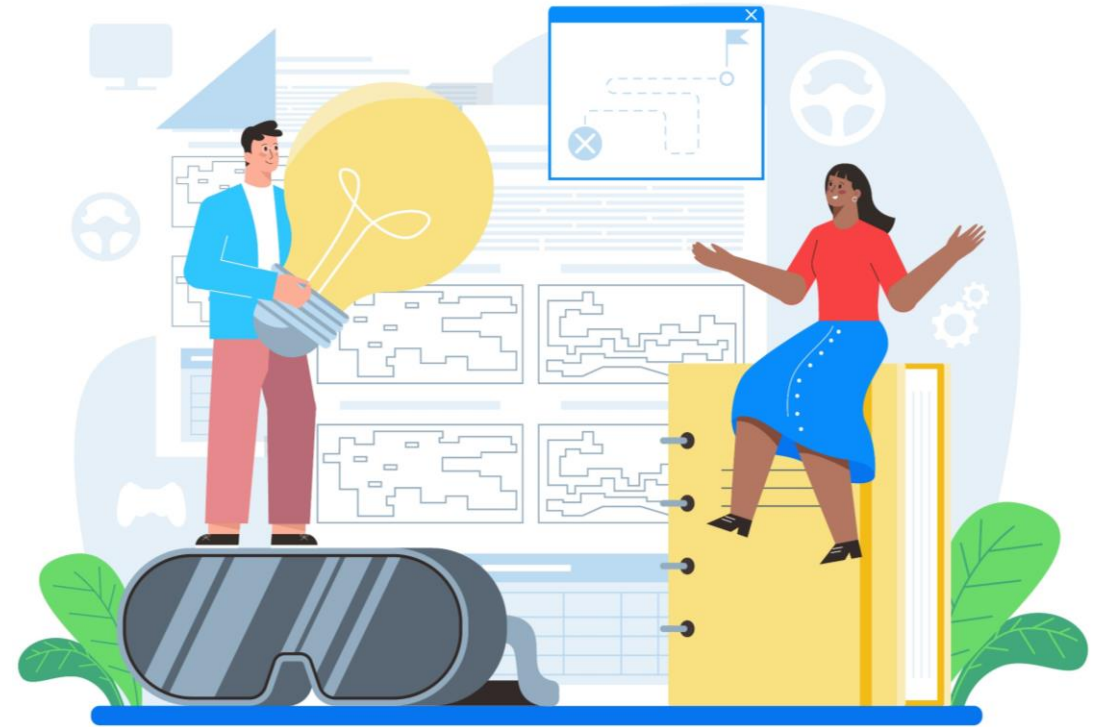
AI can support three main stages:

- **Idea Generation**
- **Brainstorming and Structuring**
- **Scientific Communication (slides/posters)**

AI supports the process, not the thinking.

IDEA GENERATION

Idea



Generating Project Ideas

Starting a Research Project

We often struggle with:

- Choosing a topic
- Defining a research problem
- Finding originality

AI can help generate initial ideas.

Tools for Idea Generation

Core AI idea generators

- ✓ ChatGPT

Best all-in-one tool for generating research ideas, project topics, and problem statements

- ✓ Perplexity AI

Generates ideas + gives **sources and references** (very useful for academic work)

- ✓ Elicit

Finds research papers + suggests research questions

AI-ASSISTED BRAINSTORMING



Brainstorming with AI

From Ideas to Structure

Brainstorming helps:

- Explore multiple directions
- Organize thoughts
- Identify relationships

AI can accelerate this process.

Tools for Brainstorming

AI Brainstorming Tools

- Notion AI → organizes ideas into structured notes
- Taskade → mind maps and teamwork
- Claude → deep reasoning and idea expansion

Visualization

Structuring Ideas Visually

AI tools can create:

- Mind maps
- Idea trees
- Concept relationships

This helps transform:

Scattered ideas → Structured thinking

- Home
- Document
- Design
- Presentation
- Image
- Video
- More
- Templates
- Brand
- Projects
- Sign in
- Upgrade

TEMPLATE.NET

Back

Here is your Mind Map template.



Task Completed

Turn ideas into clear, editable whiteboards —
GPT-4o, Nano Banana Pro, Gemini 3 Pro &
Claude Opus 4.5. 10x Faster

Upgrade

Continue Free

Prompt to generate new template

Mind Map X

T

🎤

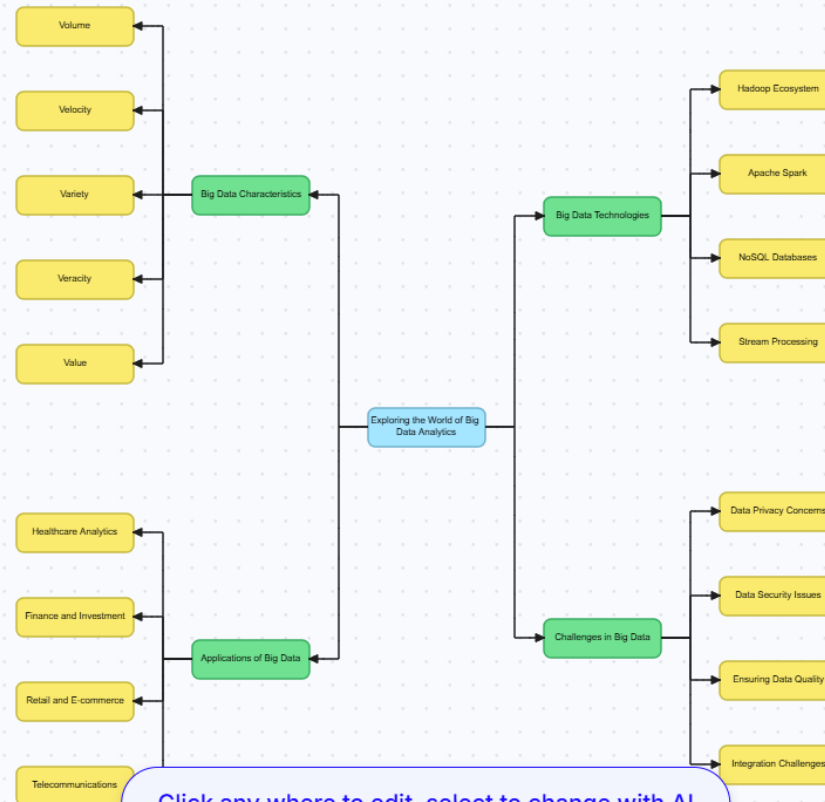
↑

Your Feedback

Create a mind map about bi...

+ Add

Point Hand
Big Data Analytics Mind Map



Click any where to edit, select to change with AI

Zoom 40%

PRESENTATIONS & POSTERS



Scientific Communication

Presenting Research

Academic work must be communicated through:

- Slides (presentations)
- Posters (conferences)

AI can assist in design and structure.

Presentation Tools

AI for Slides

- Gamma → generates full presentations
- Canva → slides with AI design
- **Tome → narrative-based slides**

Efficient Workflow

- Use ChatGPT → generate outline
- Use Gamma → create slides
- Use Canva → refine design

Faster production, better structure

  ✕

+ Nouveau

⌵

1

Transformez Votre Présentation : Guide de Conception Visuelle



2

La Structure : Fondation d'une Présentation Réussie



3

Architecture d'une Présentation Équilibrée



4

Principes de Hiérarchie Visuelle



5

Choisir les Couleurs : Palette Stratégique



6

Typography : Le Pouvoir des Polices



7

Équilibre et Espacement



Transformez Votre Présentation : Guide de Conception Visuelle

Des principes de conception aux choix visuels stratégiques pour créer des présentations percutantes qui captivent votre audience.

La Structure : Fondation d'une Présentation Réussie











NOUVEAU 



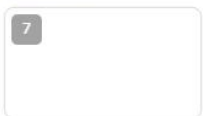




100%



+ New slide



Big Data Analytics : Maîtriser l'écosystème des données massives en 2026

Présentation complète du programme du premier semestre pour les futurs Data Engineers et Analysts.

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Role or title

T Title ▾

 Properties ▾

 Layouts

 Remix

⋮

 Design

 Theme

 Settings

 Analytics

 Hire

 Help

178
✦

Poster Creation

AI for Scientific Posters

- Canva → academic poster templates
- Venngage → visual scientific posters

📁

+

Créer

🏠

Accueil

📁

Projets

📁

Modèles

🏪

Marque

🌐

IA Canva

⋮

Plus

Vos designs

Modèles

IA Canva

🔍 Recherchez des designs, des dossiers et des importations

📺

Présentation

🌐

Réseaux

📺

Vidéos

📄

Doc

📄

Tableau blanc

📄

Tableur

📄

Site Web

✉

E-mail

🖌

Éditeur photo



Big Data Analytics



Importations



coloré flat plat illustratif an...



Noir et Gris Simple Classiqu...

CanvaCreate est de retour

👑 Tester pour 0 \$

- 📁 Modèles
- 📁 Éléments
- 📁 Texte
- 📁 Marque
- 📁 Importer
- 📁 Outils
- 📁 Projets
- 📁 Applis



0:00 ▶ 0:23

0s 10s 20s 30s 40s 50s

📺

What is

"Massive, fast, and diverse data beyond traditional systems."

🔊

📺

Le

realtà

+

▼





Accueil

Modèles

DesignAI

+ Inviter des membres

Améliorer

Nouveautés

Filtrer Par

Recommandé

Modèles De Marque

Populaire

Accessible

Favoris

Voir Tous Les Modèles

Catégories

Infographies

Brochures

Les Cartes Mentales

Affiches

Présentations

Dépliants

Diagrammes

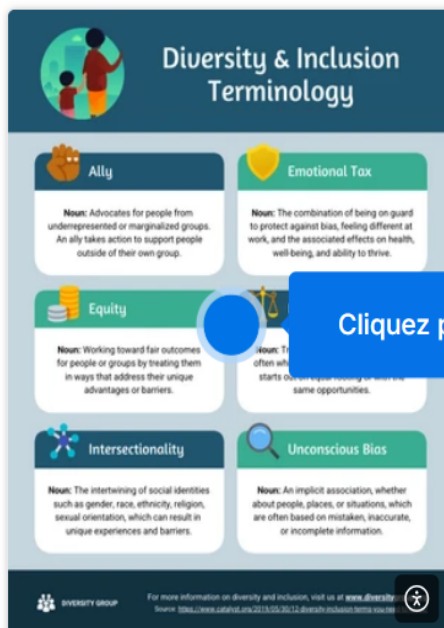
Rapports

Recherche par mot-clé, par sujet ou par caractéristique...

Filter

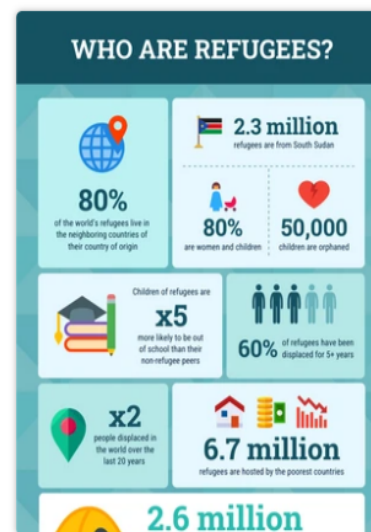
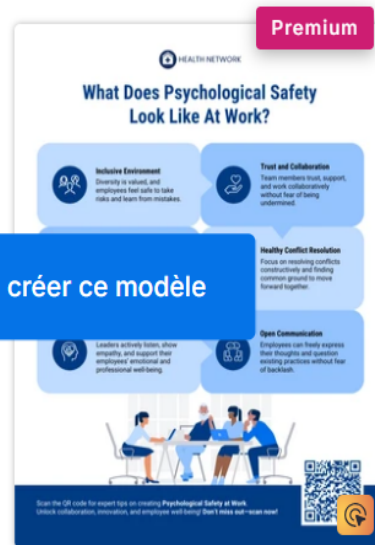
Modèles Recommandés

Créé par des professionnels comme toi



Diversity and Inclusion Terminology Infographic
Informative Infographies

Cliquez pour créer ce modèle



What AI Improves

Advantages

- Save time
- Improve visual quality
- Structure information clearly

Risks

- Oversimplify content
- Include generic explanations
- Lack scientific depth

Edraw max