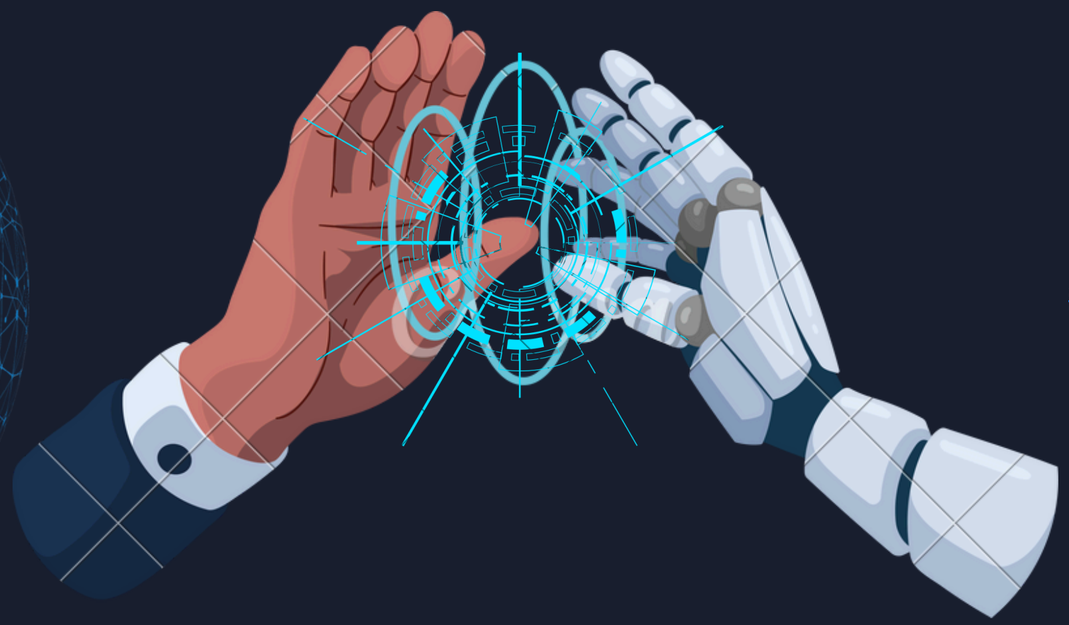


for Societal Impact Challenge

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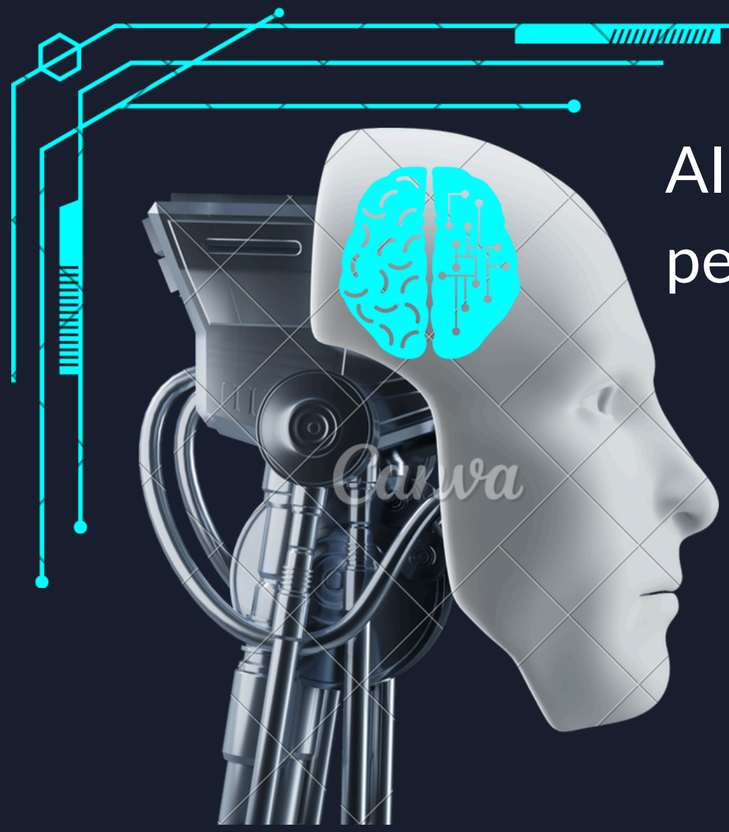
What do you naturally associate with AI?

When you think about AI, what’s the first thing that comes to mind?

What emotions or thoughts does AI spark for you personally?

How do you feel about the fast pace at which AI technology is advancing?

*Imagine a world where machines not only follow commands but also **think**, **learn**, and **adapt** on their own. This is the promise of **Artificial Intelligence (AI).***



AI refers to computer systems that can perform tasks requiring **human intelligence**.

- Problem-solving
- Recognizing patterns
- Learning from experience
- Making decisions

Massive Data + Powerful Computing = AI is **evolving faster** than ever before.

AI in Action: Transforming Industries



Healthcare:

- Medical Imaging
- Personalized Medicine
- Drug Discovery



Environmental Sustainability:

- Climate Modeling:
- Smart Agriculture:
- Energy Efficiency



Education:

- Intelligent Tutoring Systems
- Automated Grading
- Language Learning

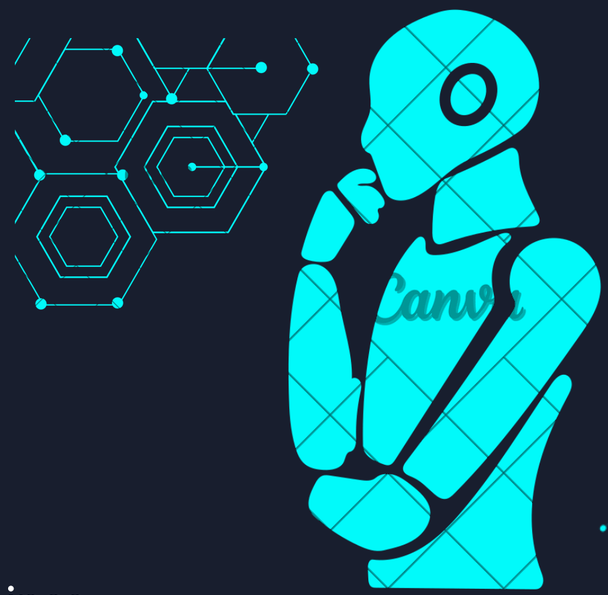


Finance & Business:

- Fraud Detection
- Customer Service

Key Technologies Integrated with Artificial Intelligence

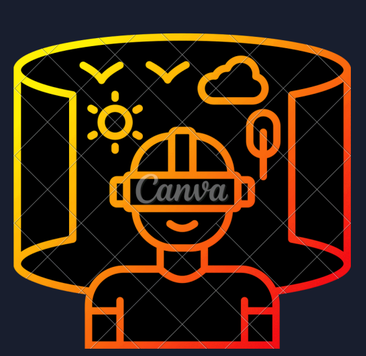
- **Generative AI**
  - AI systems that can create new content, such as text, images, music, and even 3D designs.
- **Machine learning (ML)**
  - AI learns from data to make decisions or predictions.
- **Natural language processing (NLP)**
  - AI understands and generates human language
- **Computer vision (CV)**
  - AI interprets and understands visual information
- **Robotics**
  - AI enables autonomous decision-making and control of machines
- **Neural networks and deep learning (DL)**
  - AI attempts to simulate the workings of the human brain for pattern recognition and decision-making.

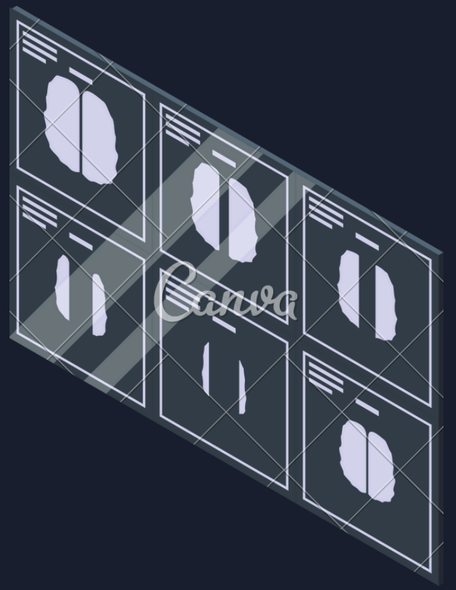


Machine Learning



Computer Vision

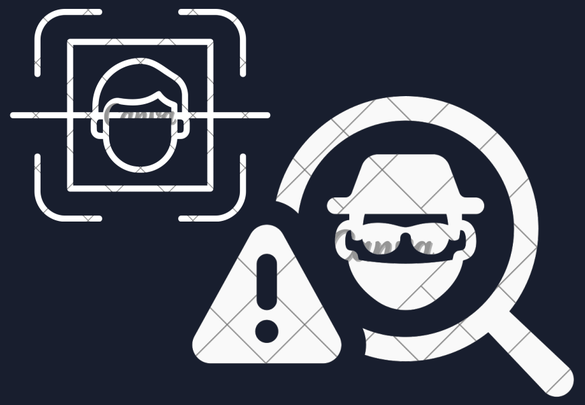




Natural Language Processing

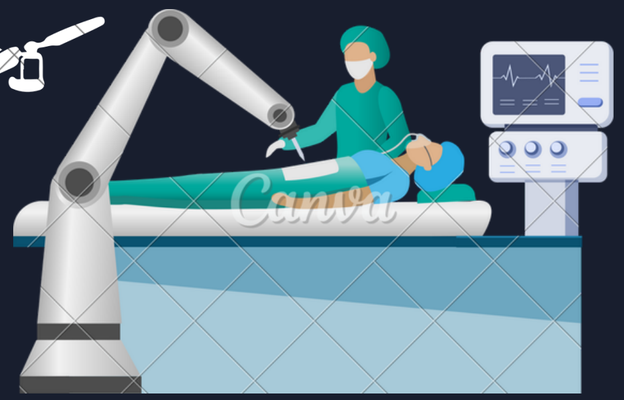


Deep Learning



Robotics





Ethical Implications of AI



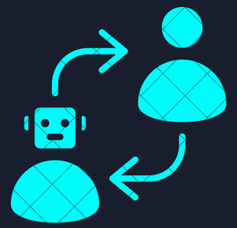
Bias and fairness

- AI systems can inherit biases from the data they are trained on, leading to unfair or discriminatory outcomes.



Privacy Concerns

- AI systems often require large amounts of data, raising concerns about user consent, data security, and potential misuse.



Job displacement

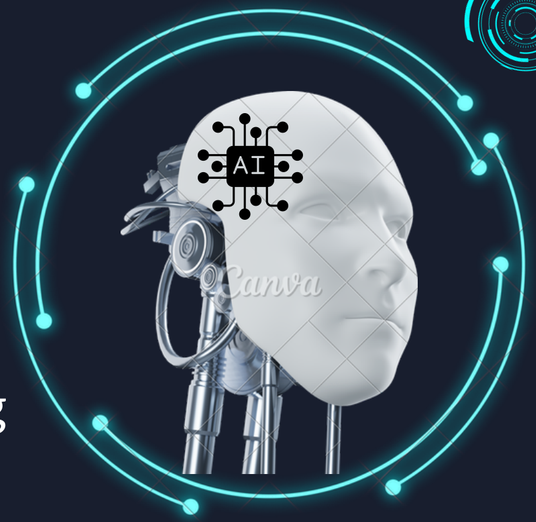


Responsibility and Accountability



Weaponization

Your challenge



Group work

1. Think about a **Societal Challenge**
   - What specific problem within the broader challenge are you addressing

2. Brainstorm how AI can be used to address the challenge
   - What type of AI technology could be leveraged?
     - (e.g., machine learning, natural language processing, computer vision, etc.)
   - Are there any existing tools or systems that could benefit from AI integration?
   - What are the ethical implication of implementing AI ?

3. Prepare a presentation:
   - Brief description of your AI solution
   - Explain the potential **benefits** and **drawbacks**
   - How would the solution impact **people**, **industries**, or **environments**?

Presentation and Discussion

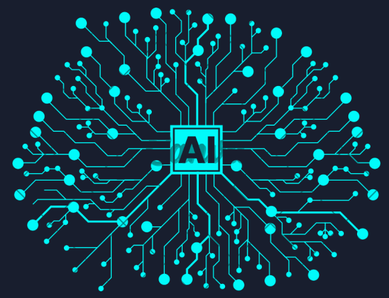


Your challenge

- Unite as a team
  - Try to figure out if you can work well together.
- Get to know each other better
  - Strengthen team dynamics and start building trust.
- Build the roadmap of your product
  - Define the vision, goals, and timeline for your product development.
- Build an MVP (Minimum Viable Product)
  - Develop a functional version of your product to test and validate core features, that ultimately brings your idea to life.



Key Learnings



- Collaboration across fields drives **innovation**
  - Interdisciplinary teamwork helps solve complex societal challenges by integrating diverse expertise.

- **AI** solutions need diverse expertise
  - Fields such as technology, healthcare, education, and environmental science can all contribute to developing more effective AI solutions.

- Teamwork leads to **ethical, impactful solutions**
  - Collaboration ensures that AI is developed with consideration for ethical concerns and maximizes its positive impact on society.

Continue Exploring AI for a Better Society!



Thank you!

Sorana-Stefana Lehene

tomorrow university of Applied Sciences

