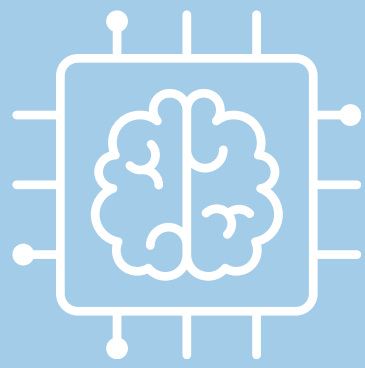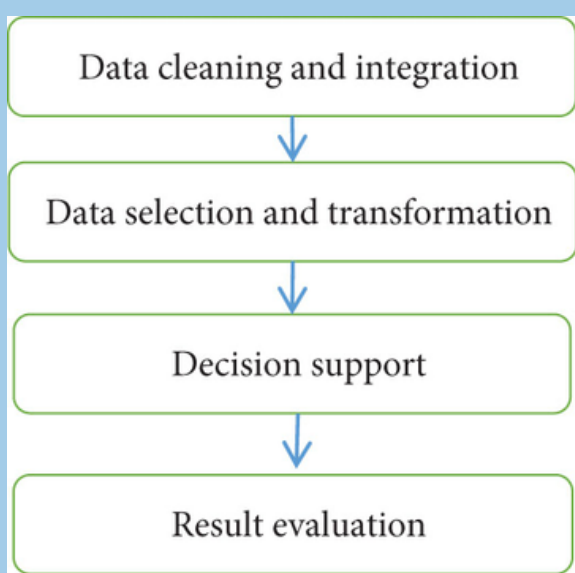# MIMICKING HUMAN INTELLIGENCE

Digital Transformation

AI is playing a vital role in STEM not only by expediting research and problem-solving but also opening up new frontiers by enabling machines to learn and adapt, revolutionizing the way we want ultimately pushing the boundaries of what is possible in these disciplines.

Mechanics & Principles

Data cleaning and integration
↓
Data selection and transformation
↓
Decision support
↓
Result evaluation

The decision-making process in AI involves several steps, often implemented through integration, data selection, supporting decision and finally result evaluation.

Neutral Networks consist of interconnected nodes or neurons as seen here which are organized in layers. They are estimating models inspired by the structure and function of the human brain
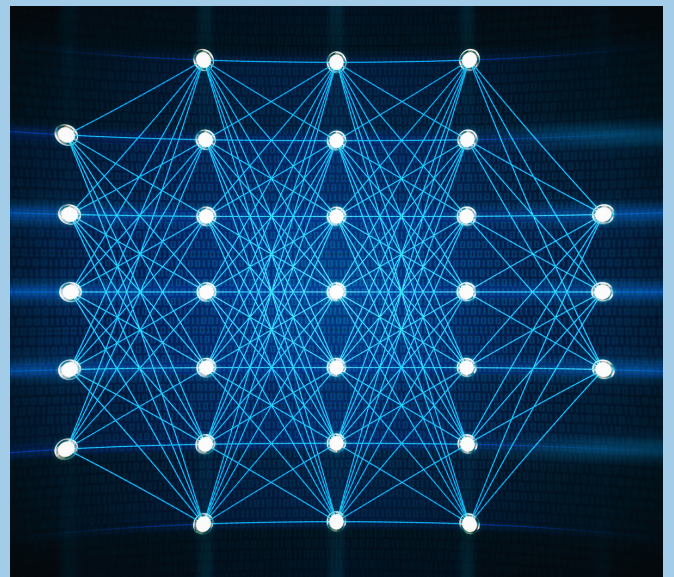
AI in STEM

- Biology
- Astronomy
- Engineering
- Mathematics

- Cybersecurity
- Chemoinformatics
- Data Analysis
- Geosciences
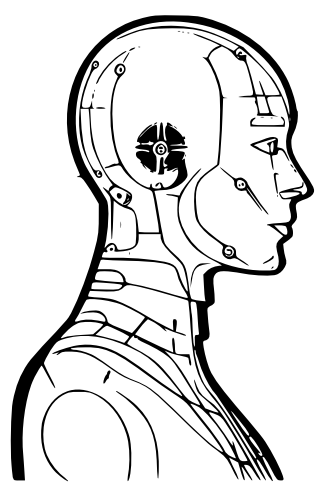
Where is it taking us?

The field of AI-driven STEM endeavors has been rapidly evolving, and several future prospects and potential breakthroughs can be anticipated in areas such as:

- Space Exploration

AI can enable spacecraft and rovers to make real-time decisions based on their surroundings.

- Healthcare

Personalized medicine, enabled by AI, can tailor treatment plans based on an individual's genetic makeup and other factors.