

Introducing the 5 Big Ideas in Artificial Intelligence
using Internet of Things in STEM education

Hands-On AI: IoT Projects with BBC micro

5 IoT projects were created that utilize the BBC micro:bit and several sensors, actuators and electronics to teach the **5 Big Ideas in AI** through a hands-on learning approach.

1

Smart Intruder Alarm

2

IoT Robotic Car

3

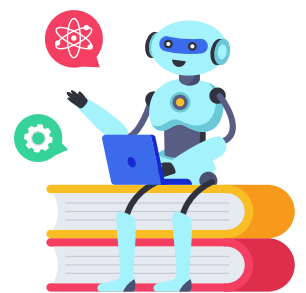
AI in Computer Vision

4

Voice-controlled Home Lighting

5

AI-powered Puzzles



The **AI4STEM Kit** was also created which contains all required material and electronic components along with a user manual. Several kits were produced and will be given to educators for testing purposes.

Finally, the **AI4STEM Academy** was developed and can be accessed in this link:

<https://academy-ai4stem.erasmusplus.website/>