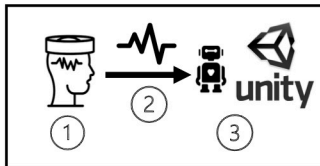


An Online Human-Agent Interaction System: A Brain-controlled Agent Playing Games in Unity



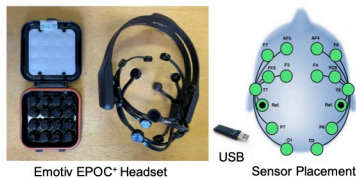
PRESENTER:
ZEHONG CAO JIE YUN

BACKGROUND: Developing an EEG-based brain computer interface is an important study to contribute to the human-agent interaction community. Currently there is no open-source systemic work that links from online EEG recording, visualization, and processing with a deep learning core to a flexible agent design platform, such as Unity3D for games. Our study aims to develop an open-source online human-agent interaction system: a brain-controlled agent playing games in Unity, focusing on:

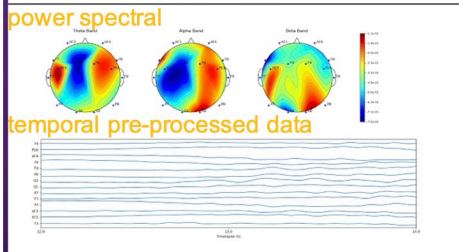


1. Real-time brain signals recordings and visualizations from an EEG headset.
2. Human brainwaves to control an agent.
3. Create an agent playing games in Unity.

HARDWARE



Testing Setup

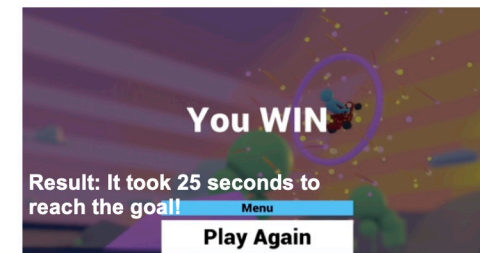


EEG Visualisations
(update per second)



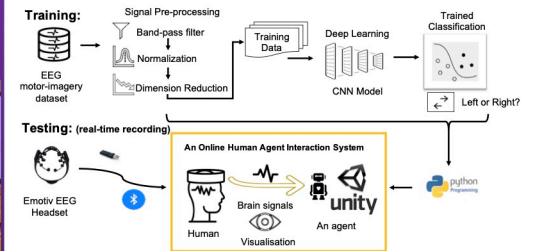
Unity Karting game

Karting Game Scenario

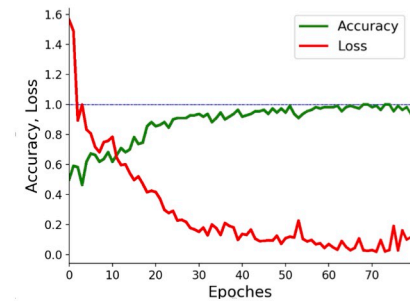


[Github code <https://github.com/nomatterhoe/Online-EEG-HAI>]

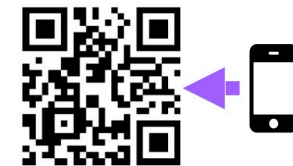
SOFTWARE



RESULTS



Take a picture to view the demo video



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