



Motion capture and virtual reality platform

This laboratory is equipped with a state of the art multi-camera motion capture system, various devices for virtual reality immersion, and sporting equipment, ideal for testing wearable robots, body sensor networks and life assistance robots.

User studies in a virtual or real environment can be coupled with an EEG measurement system and motion capture in an open space environment.

Key Features

- High precision and high frequency
- Multimodal sensor data recordings (16 wireless IMU-EMG sensors)
- Oculus VR goggles & Kat VR platform
- EEG cap for brain signal acquisition

Possible Applications

- Virtual reality
- Robotic movement recording and analysis
- Gait analysis
- Human Motion Analysis



Access information

Corresponding infrastructure	Imperial College London The Hamlyn Centre
Location	Bessemer Building, Kensington, London SW7, UK
Unit of access	Working day

Technical specifications

10*Vicon Vero 2.2 cameras	2.2MPX@330FPS
1*Vicon Vue camera	720p@120FPS or 1080p@60FPS
Markers	50*14mm, 50*9.5mm
Wireless IMU-EMG	16*10-Channel (1-ch EMG, 9-ch IMU)
g.tec g. Nautilus wet EEG cap	32 channels, 250 Hz, compatible with LSL
g.tec g.Nautilus dry EEG cap	16 channels, 250 Hz, compatible with LSL



Additional information

Vicon Vero + Tracker Installation Tutorial:

<https://www.youtube.com/watch?v=2QRI2zzwhRk&feature=youtu.be>