

Experiencing the World Cup Everywhere

The Challenges

People around the world would like to participate in 2022 FIFA World Cup™ in a meaningful and fun way. The objective of this proposal is to create instant 3D scenes of the World Cup for people around the world to enjoy an exciting immersive experience at their comfort, through 3D TV, online gaming platforms and immersive theater.

The Strategies

3D immersive content is created by players wearing a special jersey and socks with motion capture sensors which will send out wireless signals to a receiving device to record their movements and locations on the field. The receiving device will then map their movements and locations to the 3D models of the players and generate simultaneously a 3D immersive game. The current generation of wearable technologies enables accurate, real-time tracking of body motion. The current applications of motion capture are widely used in fitness, sport training and healthcare. It can deliver real-time 3D joint angles, position and velocity to a smartphone. It can also recognize complex motions such as sports techniques by digitizing your exact movements for immediate feedback and live sharing. Wearable 3D body motion tracking is enabling the next wave of innovation in cloud-connected industries including world events.

The Outcomes

1. The 3D game will be broadcast so that everyone in the world can watch a 3D immersive game or pregame training sessions in real time with a receiving device at home, or a tablet or smartphone on the move.
2. Immersive domes would be built around Doha and elsewhere in the world to create a real-time immersive experience for larger crowds. This would provide the audience with unique entertainment experiences beyond the game itself. This will not only engage individual viewers around the world in a special way that never happened before, but also create a platform which can be reused for other future world-wide events.

The Disciplines

- Virtual Reality
- Motion Tracking
- 3D Modeling & Rendering
- Gaming



About the Project
Project PERCEPTION NEURON brings you an intuitive and affordable Motion Capture System

Adaptive
Suitable from 1.7m to 2.0m users

Wireless
Live and real-time motion capture

Affordable
Low cost

Easy to use
Motion capture is simplified within 10 minutes

One of the world's smallest IMU
Smallest IMU with 6-axis motion capture capabilities

Comes with SDK for Unity and Unreal Engine
For developers to develop

<https://www.xsens.com/products/xsens-mvn/>
<https://tutorial.xsens.com/video/placing- straps/>
<https://www.xsens.com/functions/3d-character-animation/>
<https://www.xsens.com/functions/3d-wearable-technology/>

<https://www.kickstarter.com/projects/1663270989/project-perception-neuron>

