POSITION VALIDATION OF GROUND-BASED ROBOTS FOR THE SCHOOL OF ENGINEERING

Motion capture is transforming learning at one of the UK's leading Universities

A lot has changed in engineering since 1881. And in tech too. Since The University of Liverpool opened its doors more than 130 years ago, their mission has been For advancement of learning and ennoblement of life. No one then could have predicted a world of robots, mocap and human tracking. Here's what happened when Liverpool University needed to verify the path of ground-based robots.

The issue

Liverpool University need to verify the path of ground-based robots. When Paolo Poletti, Senior Lecturer in Control at the University's School of Engineering, needed an optical mocap system for the verification of large scale tracking sensors, he made a call to Target3D. Whilst his lab has experience with motion capture, this time they required lab testing to ensure the proposed tracking solution for a larger scale future project was accurate. Target3D's co-founder, Ashley Keeler, worked with Paolo to establish exactly what his needs were – including flexibility of ground, flight and human tracking - to provide the best solution for him and the School of Engineering.

YouTube: Making of "Swarm" - Quadrotors are "Amazing in Motion"

The solution

As with most of Target3D's sales processes, the key stage in the decision making was the demo. Ashley took a choice of OptiTrack Prime 41, OptiTrack Prime 17W and OptiTrack Prime 13 to Liverpool, to showcase the camera's capabilities (dare we say

wizardry?), discuss the pros of each one and demonstrate them in a live setting. What started as a perceived need for the Prime13 cameras, after much tech playing later it was clear the Prime 17 and ROS platform were more suited to Paolo's needs. A few months after that first call, the OptiTrack Prime 17W cameras were up and running for Paolo and his lab team. As a multi-talented camera with a 70degree field of view, the wide-angle coverage makes it ideal for large volumes in small spaces.

The feedback

"Having an OptiTrack system was a game changer for us. Verification tasks that took days can now be performed in a couple of hours"

- Paolo Poletti, Senior Lecturer.

"Game changer"

Paolo told us that he really appreciated the human contact he had from Target3D and found the technical support useful.

"Having an OptiTrack system was a game changer for us. Verification tasks that took days can now be performed in a couple of hours," were his words.

To find out how motion capture systems can help your University to advance, speak to Target3D – the home of motion capture.

More about how we work with colleges and universities.