V-MACHINA 3

PROBLEM/ISSUE ADDRESSED

The pandemic, the increase of remote working or remote learning and the safety concerns regarding the use of industrial robot are challenging practical teaching of industrial machineries. The Virtual Manufacturing Environment (VME), developed through the three editions of the V-Machina project provides an efficient and quick way to develop VR based training for industrial machinery, such as lathe machine, or laser cutting machines.

SOLUTION

Based on Interact, the VME is a Unity plugin that allows to quickly create and deploy accurate and realistic VR training simulation without any coding skills. The generated VR experience is fully integrated in Skills.Move, a Moodle based learning management system. The user's performance, attention and emotions are monitored and logged.

WHY IT IS IMPORTANT FOR SOCIETY

These content will optimize the time spend on an industrial machine by a student already trained through VR, without the need of being supervised and without any safety hazard. Moreover, as the real industrial machine is less mobilized by training sessions, more time can be dedicated to production.

> *"Thanks to EIT, the V-Machina project was able to reach high standard by providing a powerful solution to digitalise industrial machine training"*
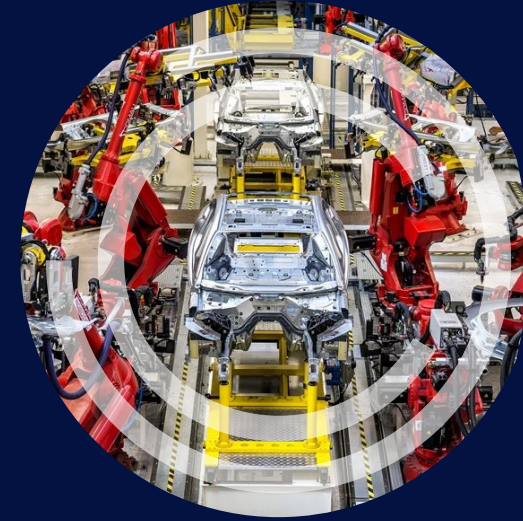
MAIN RESULTS & INSIGHTS

- A versatile platform that quickly create accurate and realistic VR training

- Multi user experience accessible from all over Europe

- Monitoring of the user's performance, attention and emotion

ENZO DELESCLUSE
Research Engineer and project leader of V-Machina Project, at CEA **MAIN PRODUCT** Virtual Manufacturing Environment
AIM: Accelerating the digitalisation of training on industrial machines through Virtual Reality

https://v-machina.supsi.ch/