IMMERSIVE TECHNOLOGY SOLUTIONS

Redefine Experiential Learning

ST Engineering

REALITY

MIXED REALITY

Virtual objects are integrated into, and responsive to the real environment

VIRTUAL

Real Environment

Augmented Reality

The real environment is enhanced with virtual objects

Virtual Reality

Full immersion in virtual environment

IMMERSIVE TECHNOLOGIES

The advent of immersive technologies like Augmented Reality (AR), Mixed Reality (MR), and Virtual Reality (VR) has opened up vast opportunities for simulation training and edutainment. As a leading advanced simulation systems provider, ST Engineering offers solutions that engage, educate and inspire.

Backed by a talented pool of technologists, software designers, graphics and animation specialists, ST Engineering harnesses immersive technologies to deliver unique user experiences.

OUR CAPABILITIES

High fidelity 3D airport environment

Content Creation

From 3D modelling and animation, to 360 degree filming and photography, our digital media specialists create interactive content for a wide range of immersive applications.

Development of an AR sandtable for urban planning

Development

Combining gamification with cutting-edge immersive technologies, our team of skilled programmers enhance engagement and learning experiences through the custom development of personal and multiuser group systems.

Portable AR, MR, and VR peripherals deliver immersive and cost-effective training solutions
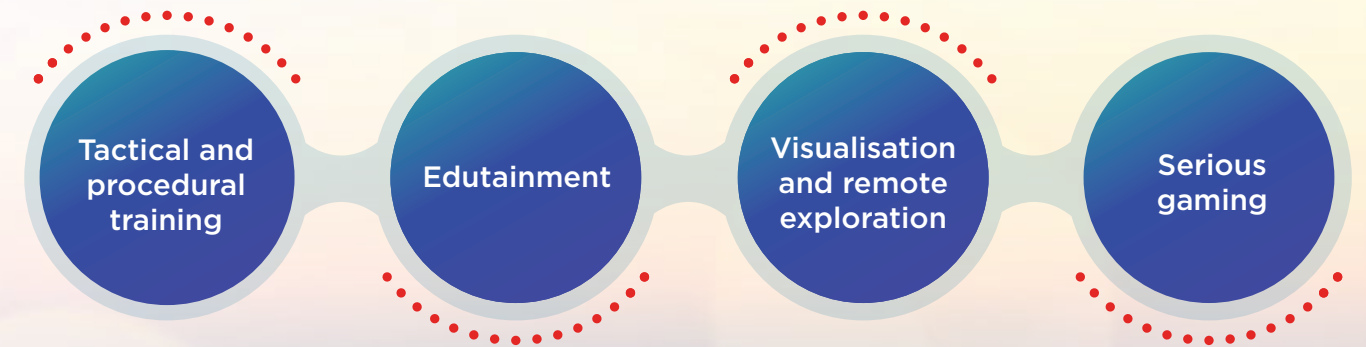
Integration and Deployment

AR, MR, and VR peripherals are integrated to invoke sensory impressions, providing a true sense of depth and scale to the augmented and virtual environments. We deliver turnkey solutions that are easily deployed to suit your training needs.

WIDE SPECTRUM OF TAILORED APPLICATIONS

The applications for immersive technologies are limitless. We are involved in a broad range of projects that address your current and future training requirements.

APPLICATIONS

- Tactical and procedural training
- Edutainment
- Visualisation and remote exploration
- Serious gaming

CASE STUDIES

Tactical and Procedural Training - VR Maintenance Trainer

Instead of flipping through massive manuals of complex protocols, maintenance trainers using immersive technologies allow trainers to hone procedural drills in maintenance operations within safe boundaries of VR.

Familiarisation of complex equipment

Virtual hands-on practice on procedural drills to enhance trainees' competency levels.

Edutainment - AR Mobile Apps

Armed with a mobile tablet and an AR app, students embark on physical learning trails with an AR 3D mascot, who shares nuggets of learning content incorporated with the life sized exhibits.
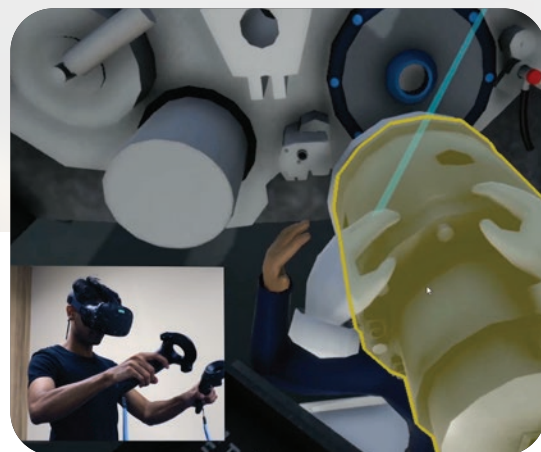

Students explore learning content through augmented exhibits

A mobile and engaging learning platform that allows trainees to learn anytime and anywhere, at their own pace. Through customised virtual content, it also caters for bespoke equipment or special conditions, to be viewed on-demand by trainees in different 3D perspectives for thorough familiarisation.

Edutainment - Flight Crafter

Flight Crafter is a VR edutainment game that stimulates interest in aviation, aerospace and aerodynamics. By experimenting with different aircraft designs and experiencing their flight effects, players are immersed in an experiential learning environment.

Players configure their aircraft model based on different flight parameters

Players learn about flight dynamics and concepts through a flight experience of their chosen configuration.

Visualisation and Remote Exploration - **MR Investigation Trainer**

Featuring MR technologies, this app demonstrates smart training with an immersive training platform for investigators' self-directed exploration of different virtual crime scenes. Training objectives include learning how to search, collect and process evidences such as DNA or fingerprints via virtual tools and other skills essential to manage a crime scene.

Serious Gaming - **VR Crime Scene Investigation Game**

Immersed in a time-based virtual reality game, players role-play as an Investigation Officer (IO) or Scene of Crime Officers (SOCO) to explore pseudo suicide scenes.

Investigating a virtual crime scene equips officers with scientific analytical and investigative abilities.

Different actions and tools are available for different roles. Inductive hand-based gestures are used for interacting with the VR objects.

TRAINING VALUE
of Immersive Technologies

EFFECTIVE
An excellent training aid, which allows trainees to control and explore the subject with better knowledge retention.

COMPREHENSIVE
Access a repository of pre-designed common place scenarios.

SAFE
Practice real-life skills in safe environments.

SCALABLE
Train individuals in procedures or teams in coordinated exercises.

EFFICIENT
Train numerous trainees repeatedly as individuals or in teams, even without the presence of a trainer.

TAILORED
Customise geo-specific 3D environment, accurately depict infrastructure and resources available.

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