DSC 2018 EUROPE VR

Driving Simulation & Virtual Reality Conference & Exhibition

XPI Simulation – World-Leading Driving Simulation and Advanced Synthetic Environments

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Introduction to XPI Simulation

- XPI formed in 2005
    - Specialist developer of driving simulation software and integrator of driving simulators
    - Activities range from desktop simulators, to car conversions and full systems on motion bases
    - Customers across local government, emergency services, training providers, motorsports, academia and defence
    - Currently c. 40 employees
    - Based in Chessington, South West London
- Acquired by Thales in November 2013

Product and Project Overview

- Products:
  - XP300 – desktop
  - DS1 – single-seat
  - DS2 – full-car

XP300

DS1

DS2

- Projects:
  - Toyota Motorsport
  - South Wales Police
  - Warwick University
  - Scout (AJAX)
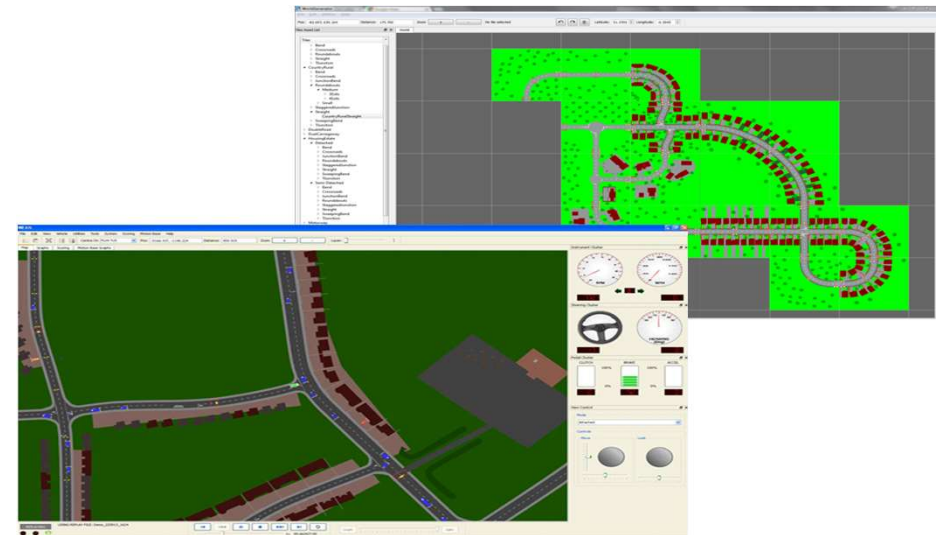 - Modal Training

Toyota Motorsport

Warwick University

Scout (AJAX)

Key Capabilities

- Full suite of driving simulation software
  - Civil and military driver training
  - Behavioural analysis
  - HMI development
  - Open, flexible architecture
  - Scenario and database creation tools

- Synthetic environment development
  - LiDAR scanned geo-specific databases

- Leading provider of research for UK Defence Science and Technology Laboratory (Dstl)
  - Advanced synthetic environments
  - Use of consumer technology (VR/AR) for military training

Connected Autonomous Vehicles

- Seeking to address the 5 billion mile challenge identified by RAND through simulation-based testing

- No framework currently exists to enable results from simulation-based testing to form part of a certification activity

- Leading CCAV-awarded feasibility study examining Certification of Autonomous Vehicles in Synthetic Environments (CAVinSE)

- Key partner in OmniCAV project addressing development of a rural-focused simulation and testing environment

XPI Differentiators

- Proven simulator-based military driver training solution – validated by Dstl

- High-fidelity 3D databases from LiDAR capture

- Expertise in full-car conversion

- Modular and extensible architecture

- Turnkey systems integrator

- Cross-domain knowledge