



# DSC 2023 EUROPE VR

Driving Simulation & Virtual Reality Conference & Exhibition



**UNIVERSITY OF LEEDS**

Working with communities and businesses  
to design the city of the future

**Virtuocity**  
A centre for city simulation

## Virtuocity, A Centre For City Simulation

Pete Woodthorpe, Programme Manager

Antibes

September 6<sup>th</sup> – 8<sup>th</sup> 2023



# Virtuocity@Leeds:

- Human in the loop simulation centre
- A 30-year track record
- Research focused team, funded by UKRI, EC and commercial project work

## What we do:

**Human Factors and Safety**

**Applied Behavioural Modelling**

**In-House Software Development**

**Regulation and Standards**

(ISO, BSI, UNECE)

**Computer Vision and Machine Learning**

**Transport and Road Planning**





# Our Facilities

## Driving Simulator



## Sim and Research Teams



- Psychologists
- Human Factors experts
- Ergonomists
- Software Developers
- Engineers
- Computer scientists

## HIKER: CAVE-based ped sim

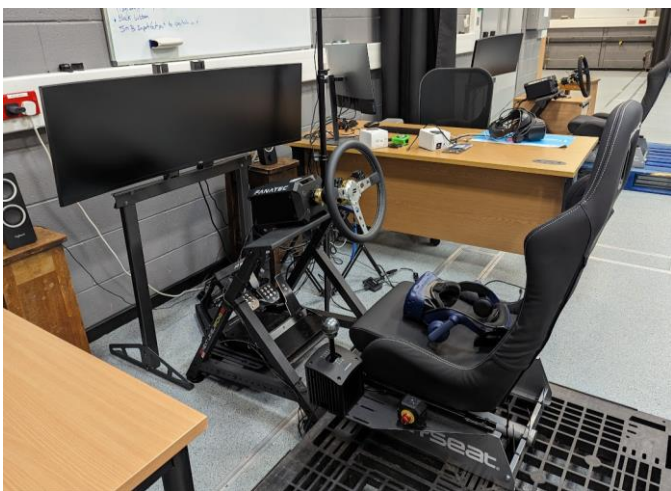


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## Static Simulators & VR/AR Suite



## Machine Learning Cluster



- Road perception
- Driver behaviour modelling
- Human-machine interaction
- Road user activity prediction

## Truck Sim





# Coming Early 2024

## Driving Simulator Upgrade

- Significant refurbishment
- New interface vehicle
- Upgraded projectors and motion system



# Coming 2025

## Multi Modal Transport Simulator

- Interchangeable cab sim
- Focusing on flexibility and accessibility for new and developing transport modes



### Coming soon

- Upgraded Distributed Simulation with avatar representation
- Deployment of newly collected motion capture assets into driving simulator scenarios



# To find out more, or to collaborate please contact:

At the show

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**Human Factors and Safety Group**

[www.uolds.leeds.ac.uk/](http://www.uolds.leeds.ac.uk/)  
[www.environment.leeds.ac.uk/transport](http://www.environment.leeds.ac.uk/transport)



## UNIVERSITY OF LEEDS

# Institute for Transport Studies

*Celebrating our 50<sup>th</sup> anniversary*



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# THANK YOU



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