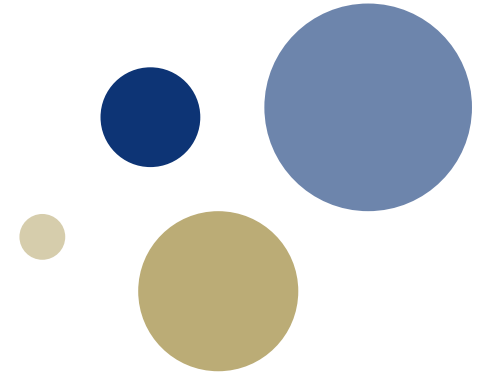




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The applications of Virtual reality road traffic simulators as risk assessment method of future mobility concepts.

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Super visors:

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2024 Activity: Building and validating VR simulator applied to study pedestrians' gap acceptance crossing behaviours.



2024 achievements

- Questions: To study specific pedestrian behaviour in VR, What is the required level of simulator realism which can allow its users to perform realistic (cognitive- motor) tasks ?
 - Background research on pedestrian behaviour
 - Developed hypotheses of the required level of simulation realism
 - Prototyping 9 prototypes of VR pedestrian simulator applied to study crossing behaviours.
 - Tested two early prototypes of the simulator to validate the hypothesized level of realisms on the usability and of the simulator and new hypotheses have been developed based on testing results.
 - Testing results indicated that intentionally decreasing that realism of some simulator elements negatively impacted the realism of the cognitive crossing tasks
 - Drafting paper 01 and attempts three submissions conferences.

2025 Goals



- Publishing the current conference paper.
- Experiment to test the simulator usability.
- Developing other hypotheses.
- Advancing the simulator based on the testing's outcomes or new hypotheses.
- Conducting more pilot testing and experiments.
- Plan for three papers.

**Question: if simulation training is essential method to train pilots..
Why playing 1000 hours of flight simulation games does not
guarantee a pilot licence**

