PAsCAL

Enhance driver behaviour & Public Acceptance of Connected
& Autonomous vehicles

Home Study Simulator

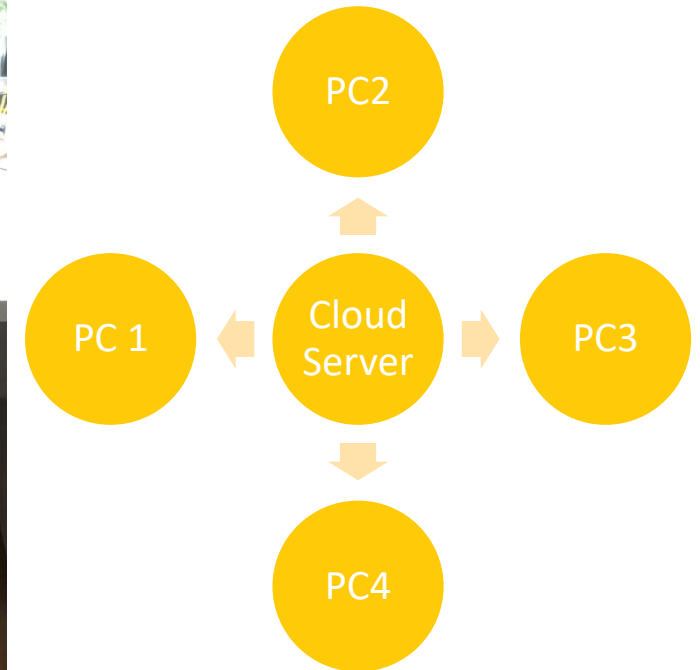**Rod McCall – LIST**

Home Study Simulator

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Overview

- Supports two environments
- Designed with driver training experts
- Large number of users
- Uses low-cost steering wheel
- Set-up in lab or at home
- Many trials over time

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Two Environments – Urban and Highway

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Features

Questionnaires

Familiarisation Step

Training (study phase)

Automated / Manual

Tasks

Data collection

GPS Navigator

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Urban Map

- 64 KM2
- Possible to add new routes (with some customisation), based on existing tasks
- Different stages of the journey
- 20-30 minute driving time (per route)

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Urban Environment Features

Tasks	Total Number	Tasks per route
Roundabout	26	11
Crossroads	63	22
Pedestrian Crossing	44	11
Overtaking area	10	1

- Duration approximately 20-30 minutes
- Different driving styles (sport/eco)
- Multiple routes

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Highway Situations I

Supports one route, approximately 30km length

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Highway Situations II

Examples of Data Collected

Distance to lead vehicle and lane centre	Speed	Pedal use
Automated / Manual Switches	Current road context (e.g. task, speed limit)	Warning Response Time

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Summary

- Two Environments
- Testing of mode change
- Useful for large scale studies
- Data collection

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