Horizon Europe: UK–EU CCAM Collaboration Webinar Series 2025

WEBINAR 3- Trustworthy AI & Validation for CAM Systems

15th October 2025

www.iukbc.org.uk

Innovate UK | Business Connect

CCAM
CONNECTED COOPERATIVE & AUTOMATED MOBILITY

Welcome – If Safety Is the Destination, Can Generative AI Be the Driver?

Create – Simulate – Predict – Validate – Trust

Simulation
Diversity & efficiency in testing

Perception
Robustness under uncertainty

Decision-making
Human-like reasoning

Validation
Faster, broader safety assurance

Human Factors
Acceptance & interaction

Digital Twins
Continuous improvement loop

Greenet

The network of Horizon Europe Cluster 5
National Contact Point.

GREENET for CCAM

The GREENET project has received funding from the EU Horizon Europe programme under Grant Agreement No 101069604

Horizon Europe National Contact Points (NCPs)

Team of national advisors, appointed by the Government, to support organisations to successfully participate in Horizon Europe by:

- Raising Awareness of the programme
- Helping you find the right Topic
- Identifying the best ways to find partners
- Navigating the EU funding & tender opportunities portal
- Developing the proposal
- Answering any other Horizon Europe related questions

Top Tip – get to know your NCP

Find National Contact Points from all participating countries

Greenet

Discover the Greenet Toolbox

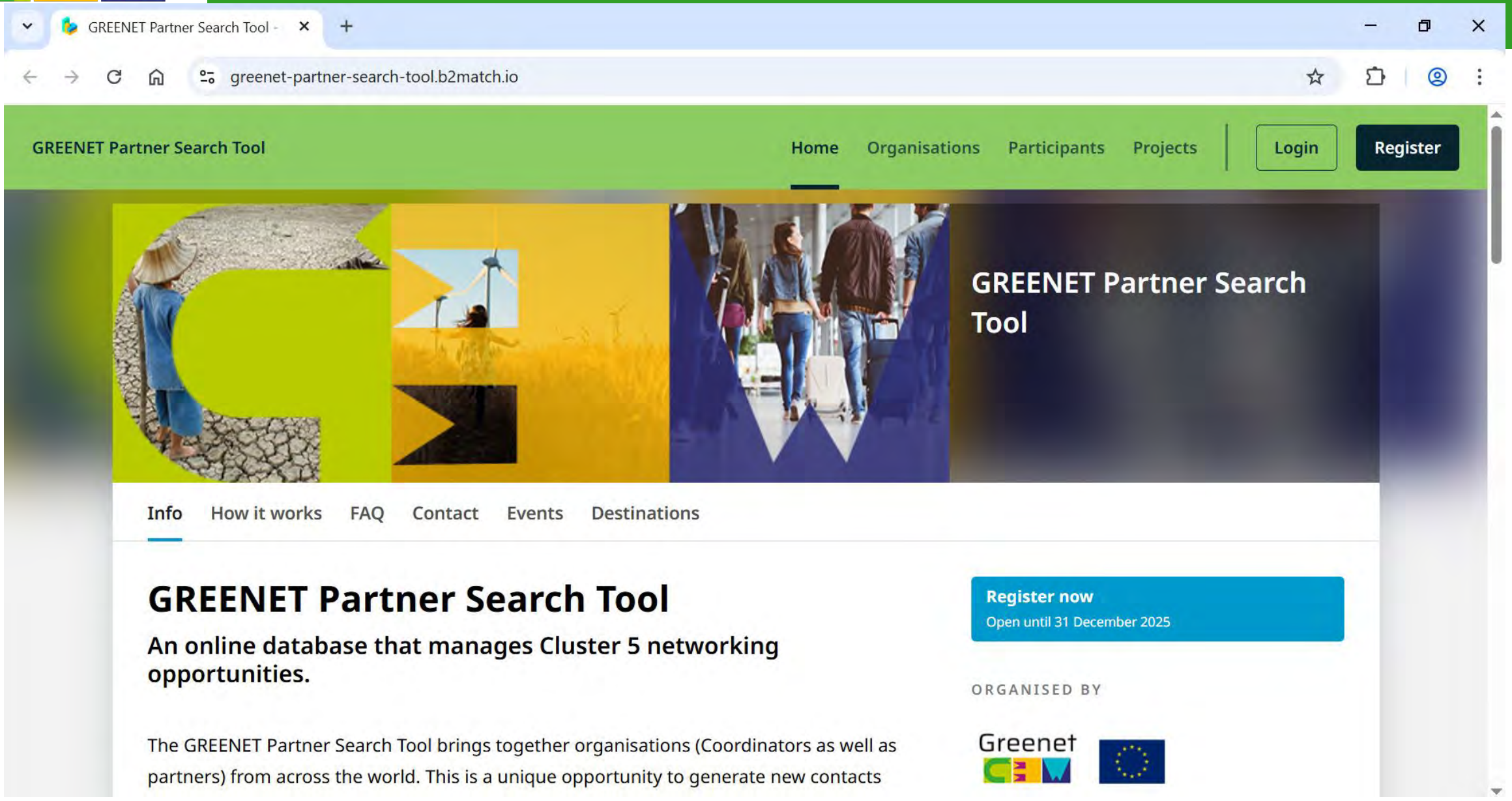
Partner Seach Tool

Stakeholder Directory

Strategic Documents Repository

Funding opportunities and factsheets

GREENET Partner Search



Stakeholder Directory

Organisations that you may need to connect with, for example:

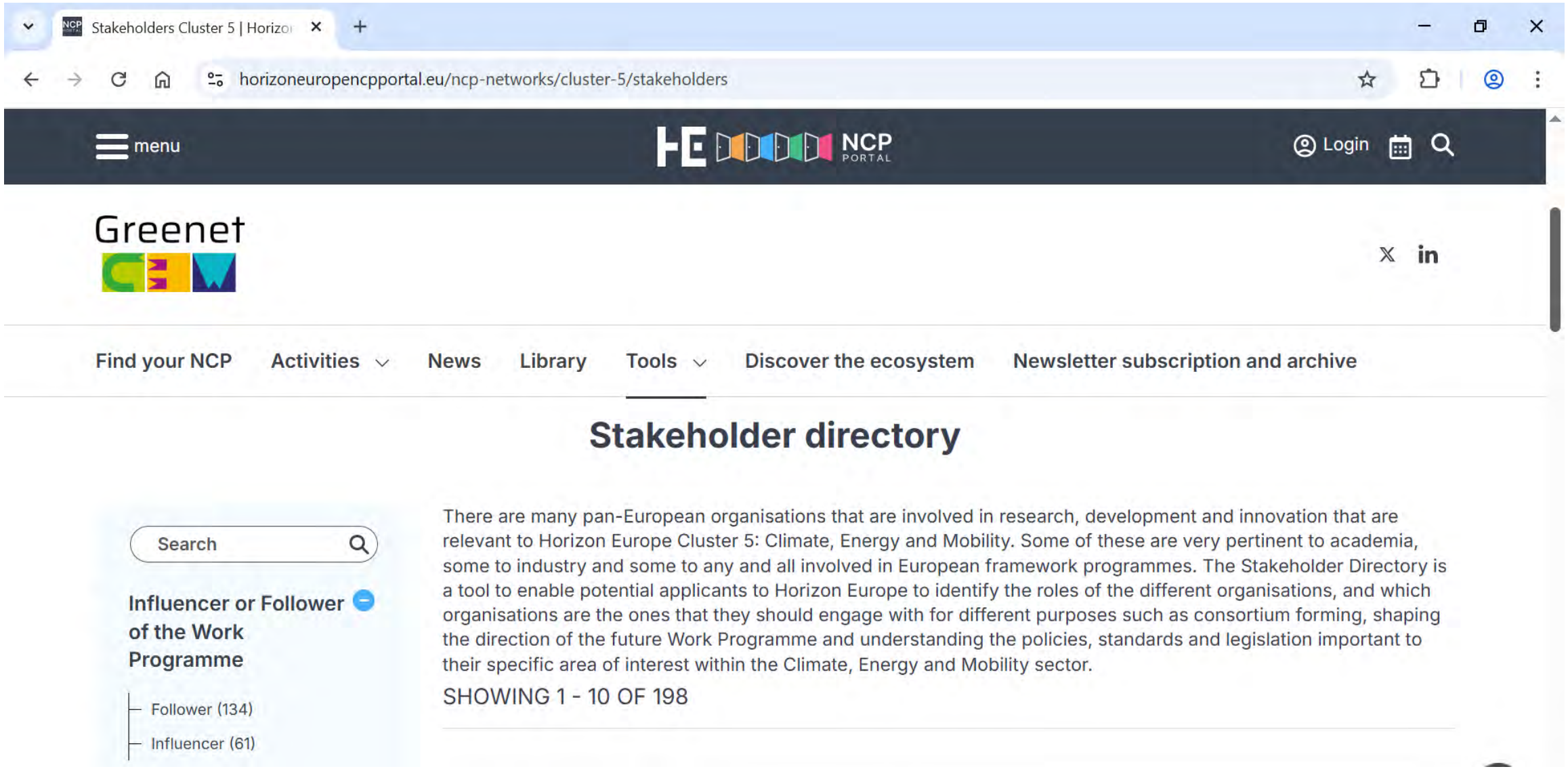
- Co-Programmed Partnerships
- Joint Undertakings
- Co-Funded Partnerships
- European Technology & Innovation Platforms (ETIPs)
- Collaborative networks
- Regulatory Bodies
- Trade Associations
- Standards Authorities
- Etc

e.g. ETIPs relevant for Cluster 5

- ACARE
- ALICE
- ERRAC
- EPOSS
- ERTRAC
- ETIP Bioenergy
- ETIP PV
- ETIP SNET
- ETIPWind
- ETIP-DG
- RHC
- SNETP
- Waterborne TP
- ZEP

Confused by the alphabet soup?

Stakeholder Directory



Stakeholder Directory – Filters and Search

Filter by:

- Influencer/Follower of the Cluster 5 Work Programme
- Type of organisation: Co-Programmed Partnership, ETIP, etc
- Sector and sub sector
- Cluster 5 Destination, Mission or Joint Undertaking

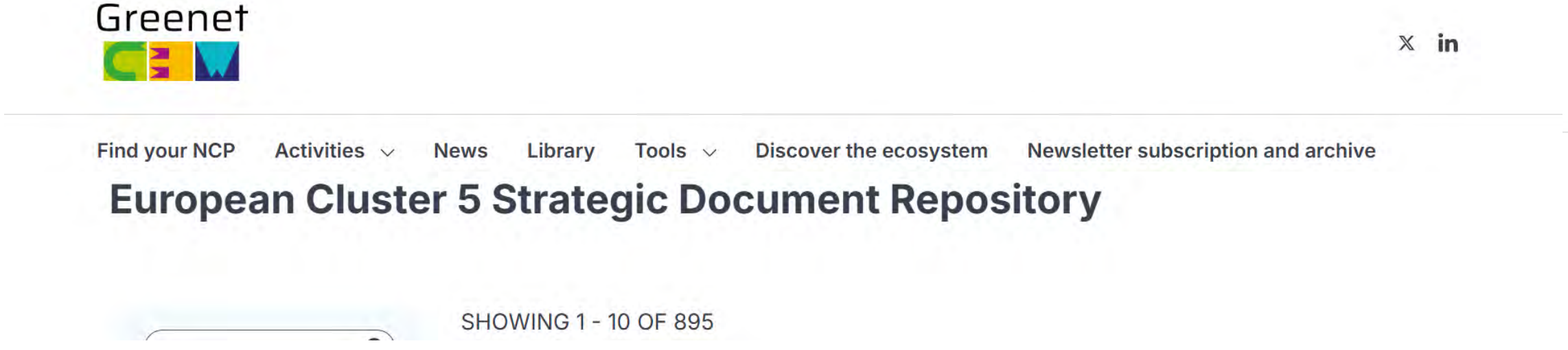
Search by Key word

Document Repository

- All key documents from the Stakeholders are available directly from the Stakeholder Directory results for each organisation

OR

- Filter and/or Search the Strategic Document Repository directly using key words for documents such as Strategic Research and Innovation Agenda (SRIA), Position Papers, etc



Discover other funding opportunities and guides

2ZERO

The 2Zero co-programmed partnership is strongly committed to achieve the use of 100% renewable energy carriers in road transport and share the vision of Europe becoming the first climate-neutral continent by 2050.

BATT4EU

BATT4EU (Batteries European Partnership) is a Co-programmed Partnership covering the entire battery value-chain, with a specific focus on battery-grade raw materials, advanced materials, cell design and manufacturing, and end-of-life aspects.

BUILT4PEOPLE

The Co-Programmed Partnership on People-centric sustainable built environment – B4P - aims to catalyse the transition to a people-centric, climate-neutral, sustainable and smart built environment.

CCAM

The CCAM is a co-programmed partnership aiming to exploit the full systemic benefits of new mobility solutions enabled by CCAM: increased safety, reduced environmental impacts, and inclusiveness.

CEF

The Connecting Europe Facility (CEF) programme supports the development of high-performance, sustainable, and efficiently interconnected trans-European networks in transport, energy, and digital services through infrastructure investment.

CETP

The CETPartnership is a multilateral and strategic partnership of national and regional research, development and innovation (RDI) programmes in European Member States and Associated Countries, aiming to boost and accelerate the energy transition and to support the implementation of the Eu...

Clean Aviation JU

The Clean Aviation Joint Undertaking is the European Union's leading research and innovation programme for transforming aviation towards a sustainable and climate neutral future.

Clean Hydrogen Partnership

The Clean Hydrogen JU will contribute to the European climate neutrality goal by producing noticeable, quantifiable results towards the development and scaling up of hydrogen applications. The focus of Clean Hydrogen JU's research and innovation activities will primarily be the production of clean h...

Other ways NCPs can help

- Sign-post you to other potentially relevant opportunities, e.g.
  - HORIZON-CL5-2026-10-D5-14: Ports of the Future
- Clarify the eligibility requirements and funding rates
- Fast-track route to EC for Topic clarification questions
- Your first port of call for any Horizon Europe related question

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National Contact Point.

Any questions?

Ask Your NCP!

The GREENET project has received funding from the EU Horizon Europe programme under Grant Agreement No 101069604

Speakers

Matt Daley

Technical Director
rFpro, and
Sim4CAMSens
Project Partner

Emilia Silvas

Assistant Professor
Eindhoven University
of Technology (TU/e).

UKRI Innovate UK | Business Connect

Sim4CAMSens

Sim4CAMSens: Project Overview

July 2023 – May 2025

InnovateUK & CCAV: Commercialising Connected and Automated Mobility: Supply Chain

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Project Introduction

Sim4CAMSens

Mobility for all: *more efficient, lower operating costs, safer*

- Huge investments being made to develop and deploy AVs

- **<u>MUST</u> ensure that AVs are safe to deploy to the satisfaction of the regulators**
- **Simulation is <u>ESSENTIAL</u> in AV development and safety assurance**

Challenges:

- Large array of sensor types & new options
- Many factors affect sensor performance
- Vast amounts & diversity of training data
- Proving simulations are credible

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The consortium

Sim4CAMSens

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syselek

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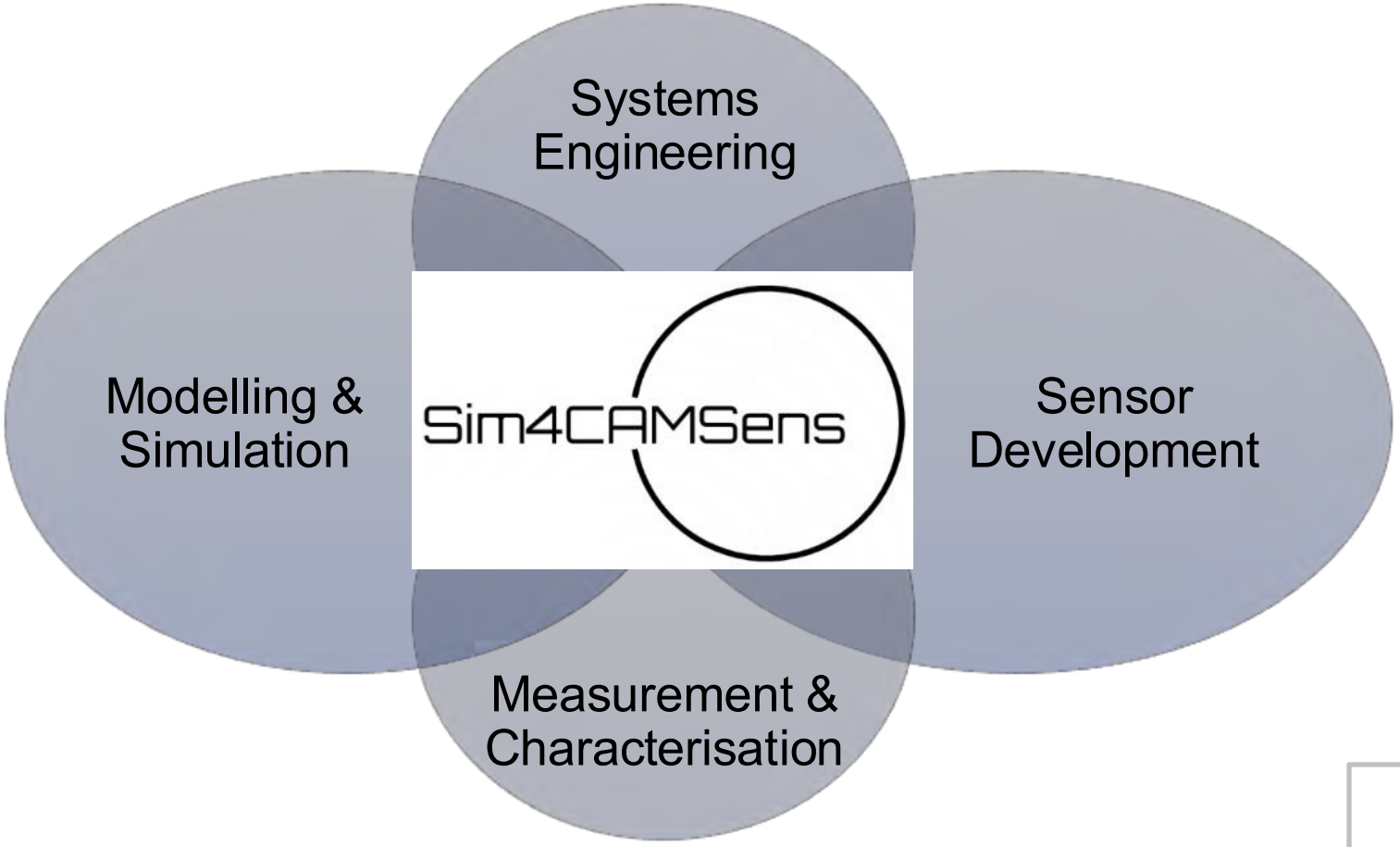

OXRF

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Project Advisory Board

Project challenges

Sim4CAMSens

To develop and mature a modelling and simulation supply chain, in the UK, for perception sensor development and testing

1. Quantify and simulate the perception sensors under all conditions

- Enable a sensor supplier to demonstrate the capabilities of their device
- Develop a sensor evaluation framework spanning modelling, simulation and physical testing
- Create test methods to cover the whole test spectrum for perception sensors

2. Generate highest value multi-modal AI/ML training data using simulation

- Real-world data collection is difficult, expensive and time consuming
- Integrate high fidelity digital models of real-world environments with sophisticated sensor models and automatic annotation

3. Propose a framework for simulation credibility and AV safety to regulator

- Including real-world validation

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Project Overview

Sim4CAMSens

WP1

Perception sensor requirements

Identify generic sensor suites for selected applications and develop sensor performance requirements, DVMs, and targets

WP2

Test data collection and analysis

Develop test methods to measure material properties and noise factors that affect sensor performance

WP3

Modelling and Simulation

Improve the simulation environment and sensor models to allow for physics based simulation of more noise factors

WP4

Accelerating sensor development

Apply the learnings from WP2 and 3 to accelerate the development of Oxford RF's perception sensor

WP5

Dissemination

Workshops with external participants and generation of roadmaps and industry reports

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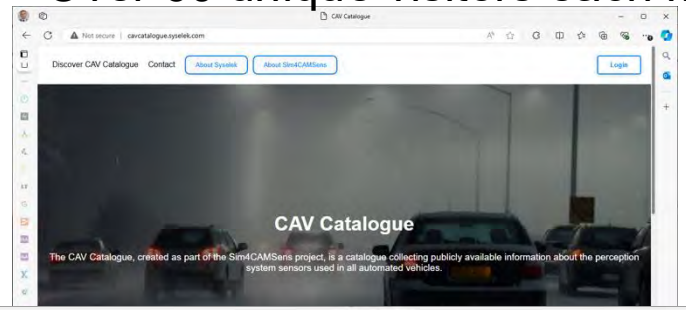
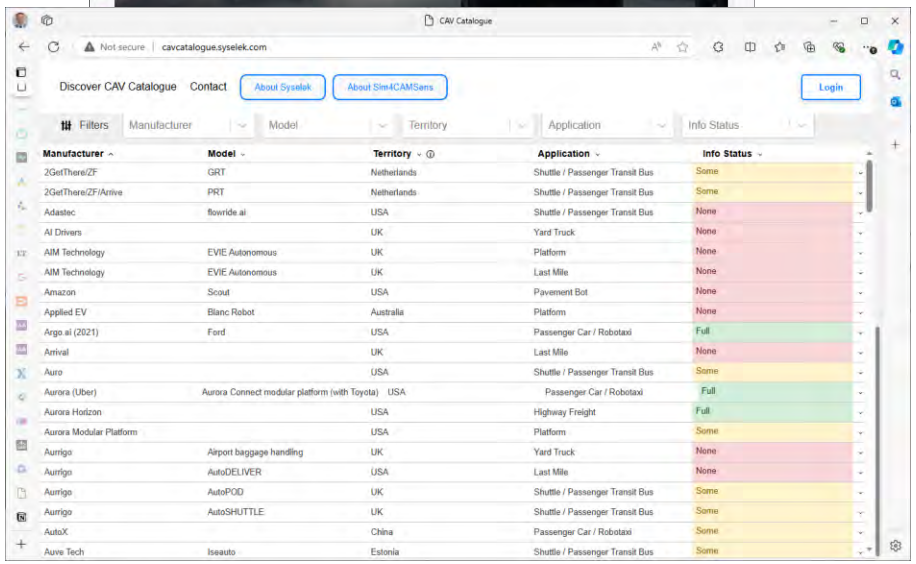
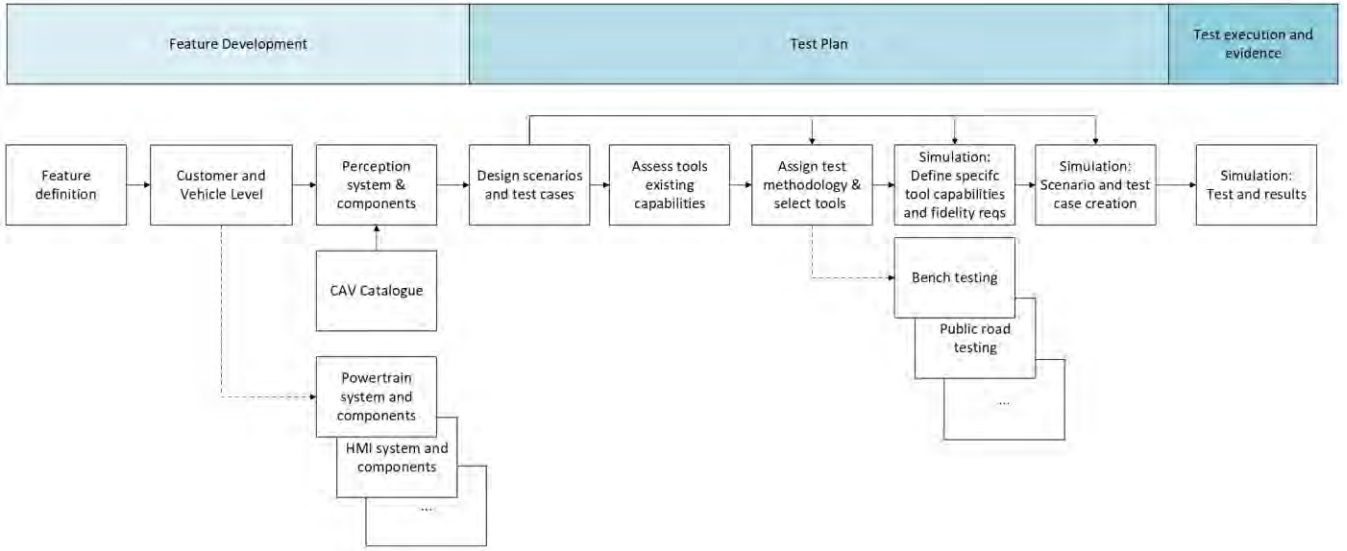
WP 1 – Outputs

CAV Catalogue© - http://cavcatalogue.syselek.com/

- 121 Manufacturers and 153 AV models
- Over 60 unique visitors each month







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WP 2: Sensor Test Methodologies and Data Collection for perception sensors.

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WP2 – 2 x Winter Testing Campaign

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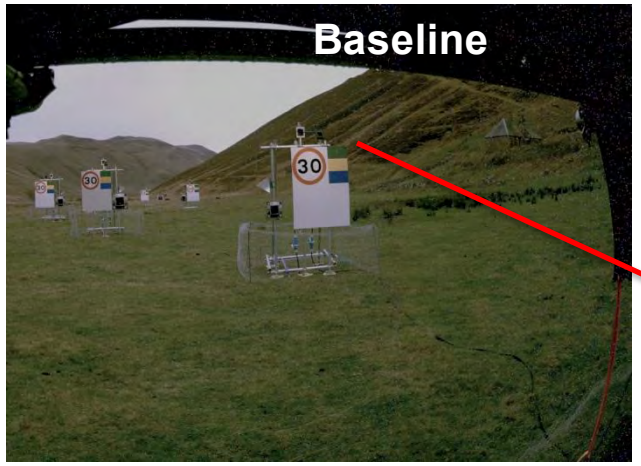

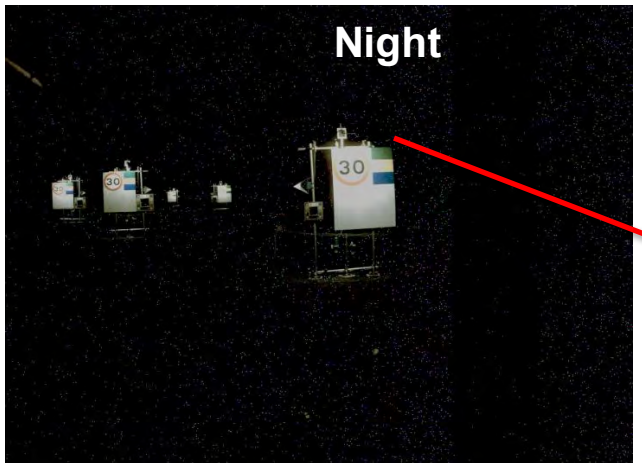

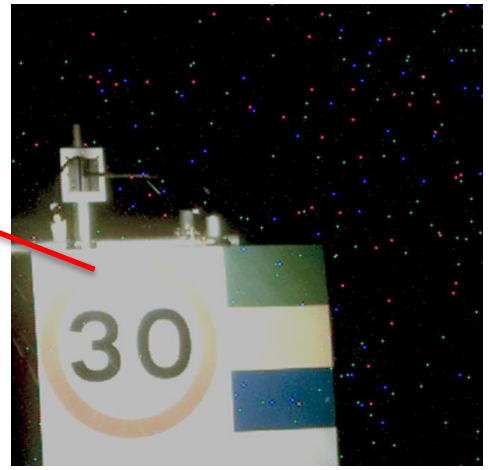

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WP2 – Track Testing

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WP2 – Material Properties Measurements

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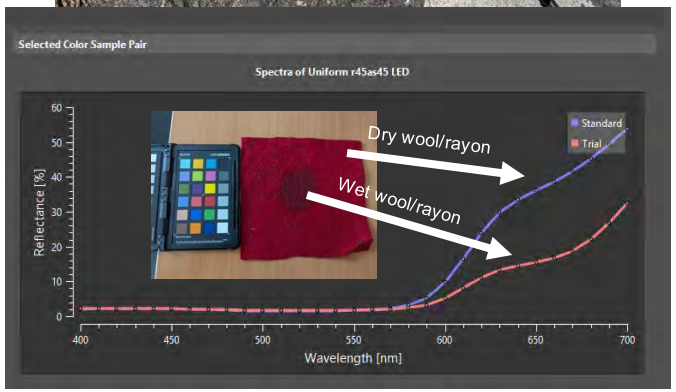
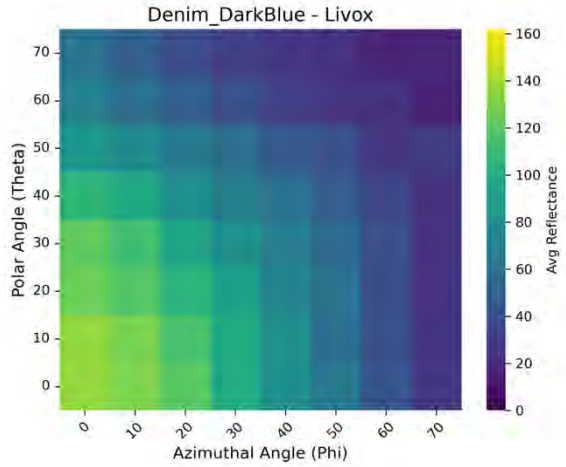
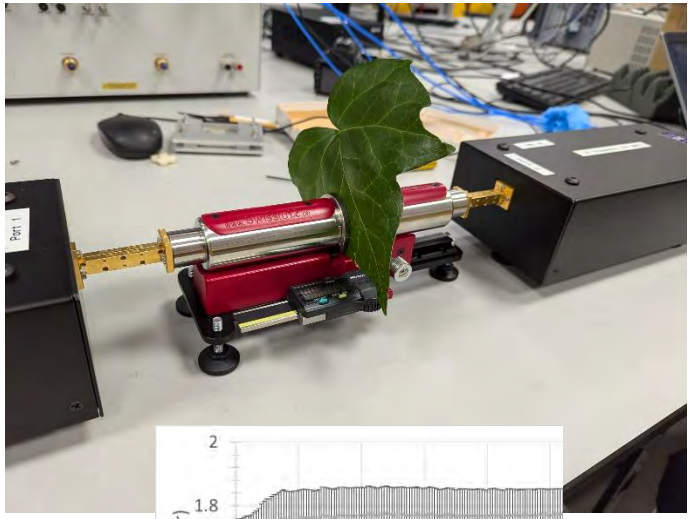
Camera Spectral Reflectance & SVBRDF

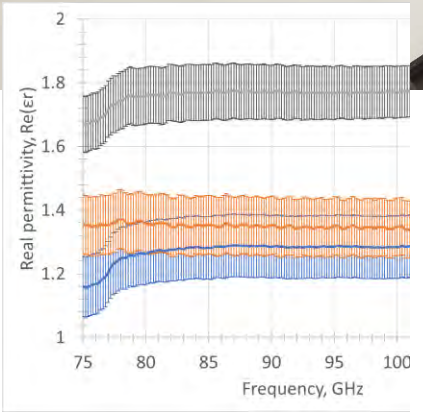


LiDAR BRDF



Radar Permittivity





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WP 3: Sensor modelling, simulation and validation.

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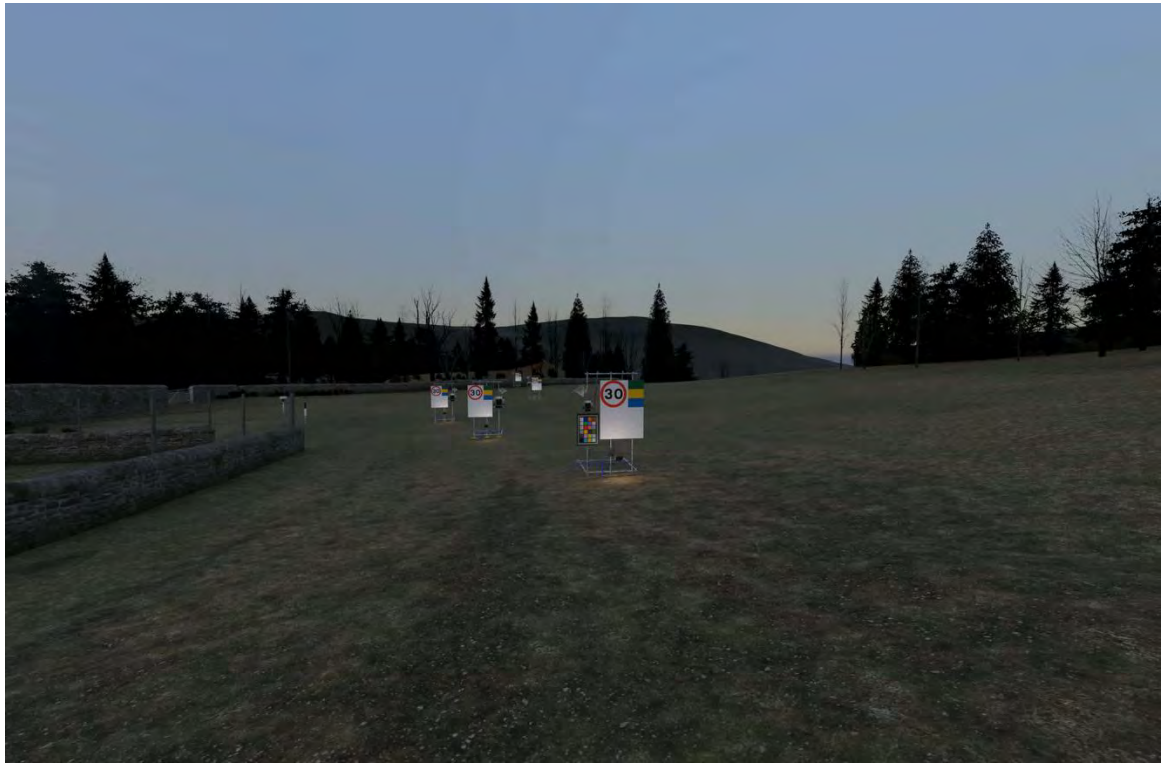
3.11: Validation of sensor models

- 24-hour render of test site completed.
- Sensor model housing modelled, giving reflections.

Sensor model housing asset

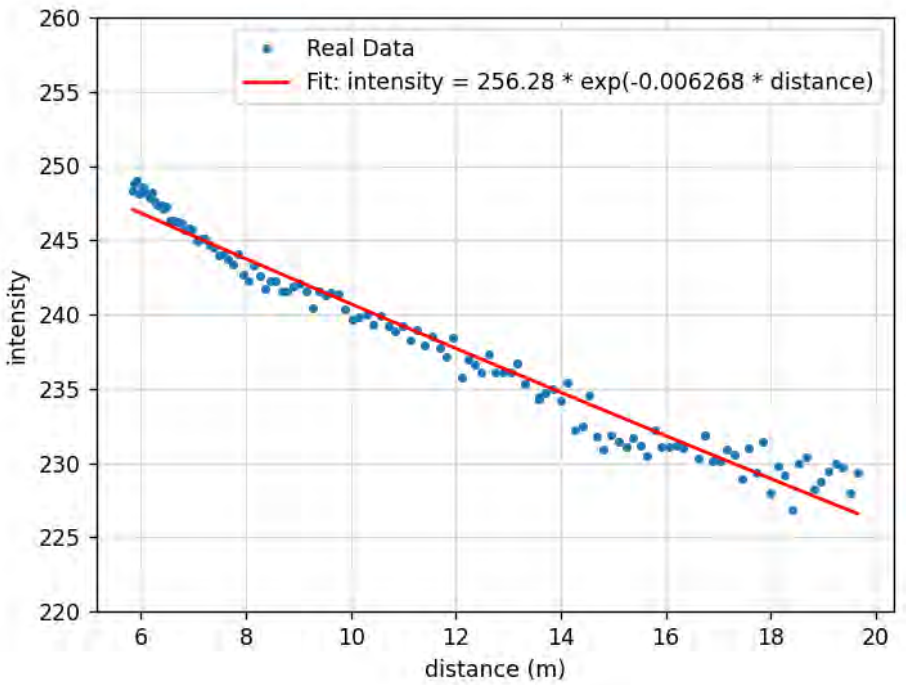
Measured data

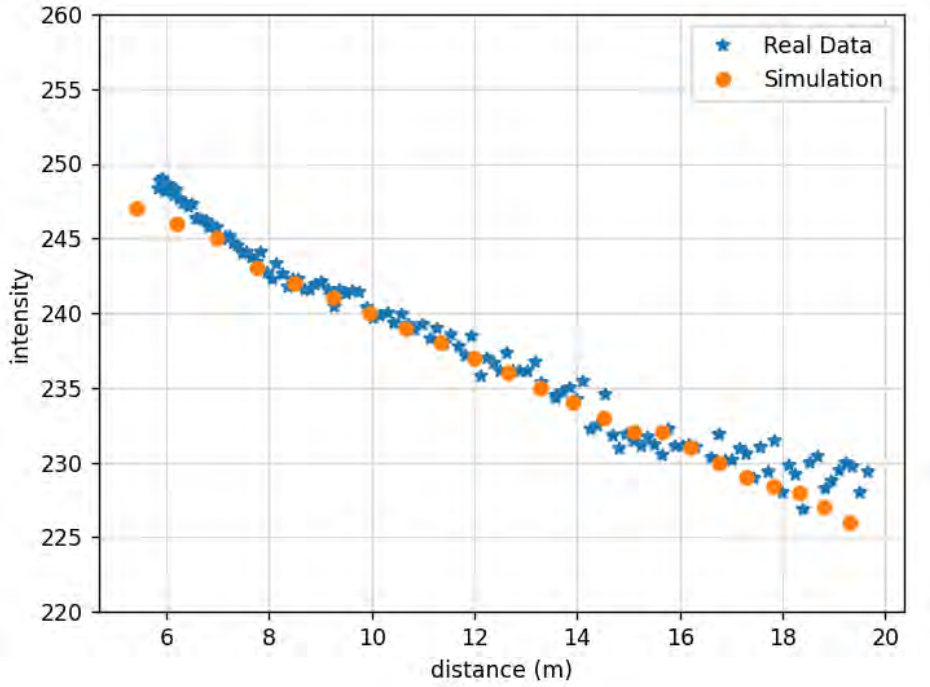
Simulation



Task 3.11 - Validation of models against test data (*Intensity*)

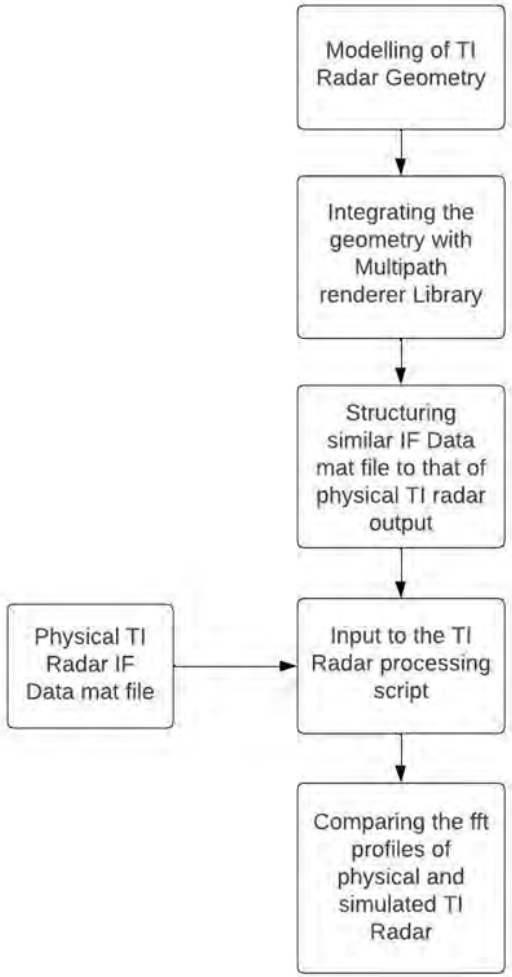
- Before validating intensity, the Received Power model of the LiDAR model was calibrated to minimize intensity errors between the simulated and real data outputs.
- Real data collected from a straight-line trajectory (Airfield Test) was used for this calibration.
- Post-calibration, the LiDAR intensity model achieved an error of 0.9515, indicating strong alignment with actual values.





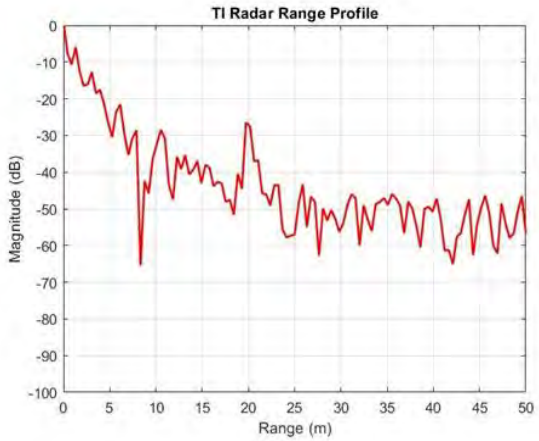
Task 3.11 - Modelling and Validation of TI Radar

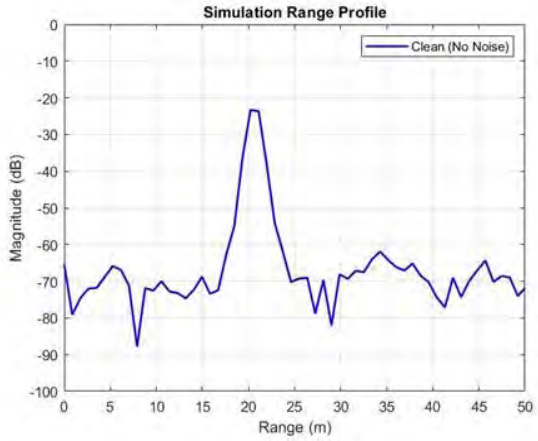
Sim4CAMSens



ABD TI Radar Testing Scenario

Similar Scenario recreated in simulation





- Both plots show consistent **peak return around 20 m**, validating the geometry and processing pipeline.
- Magnitude differences arise from real-world effects not modelled in the simulation, such as surface imperfections, hardware noise and material property mismatches. The simulation assumes ideal conditions, unlike the real radar.

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Sim4CAMSens

Exploitation and Dissemination

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Outcomes

Sim4CAMSens

AV elevate powered by rFpro

- AV elevate, powered by rFpro
- Improved sensor models
  - Camera
  - LiDAR
  - Radar
- Product launched October 2024
  - AV elevate 2025a is expected to be released July 2025

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Exploitation Success

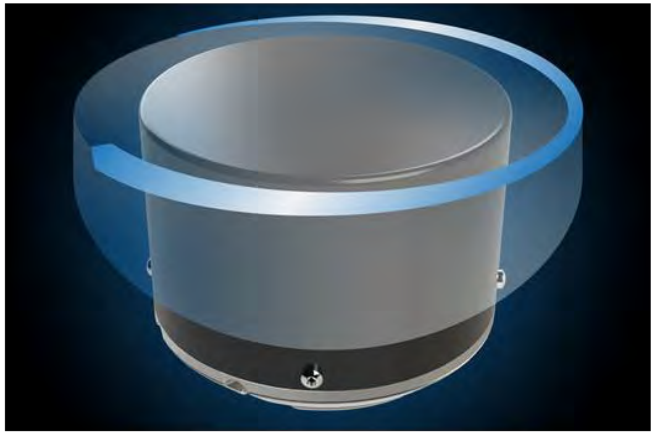
- ATTI Awards – ADAS & AV Test Innovation of the Year
  AV elevate, powered by rFpro
- AMD announced they were a customer at CES 2025
- Sony have deployed multiple licences in Japan and Belgium for technical product marketing development
- FICOSA released their own marketing video featuring rFpro's synthetic data generation
  → direct request to extend sensor simulation and synthetic data generation for in-cabin applications

Oxford RF Outcome

Sim4CAMSens

PRODUCT LAUNCH

Industry's widest FoV of up to 360°



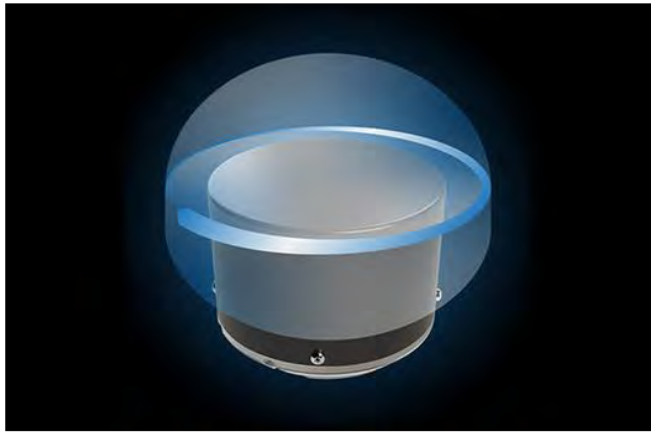
H360 SERIES

In Production

A270 SERIES

Prototypes Available

Enabling 5D/6D Sensing



DX00 SERIES

D200 ready for sale

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Exploitation Success

Sim4CAMSens

Oxford RF won at the Self-Driving Industry Awards (Lauchpad Hardware category) and the Techworks Awards (Automotive Systems Innovation catergory).

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IEEE ITSS – Dissemination Workshop

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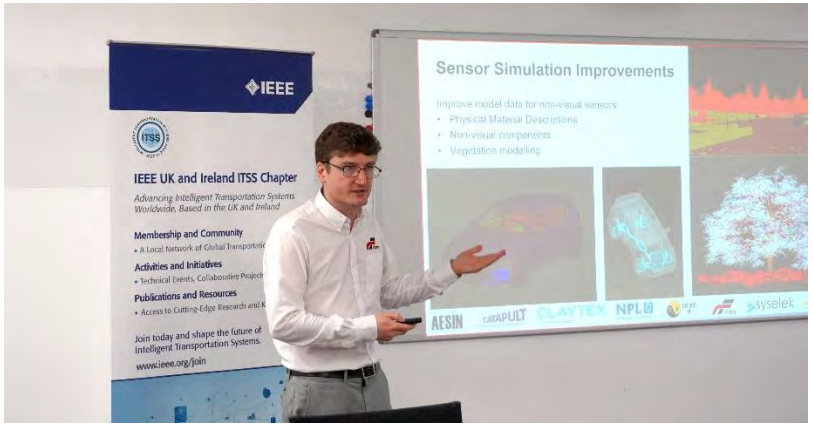

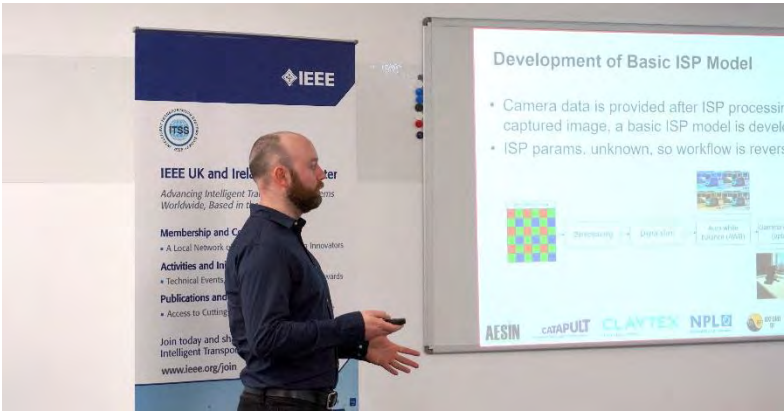

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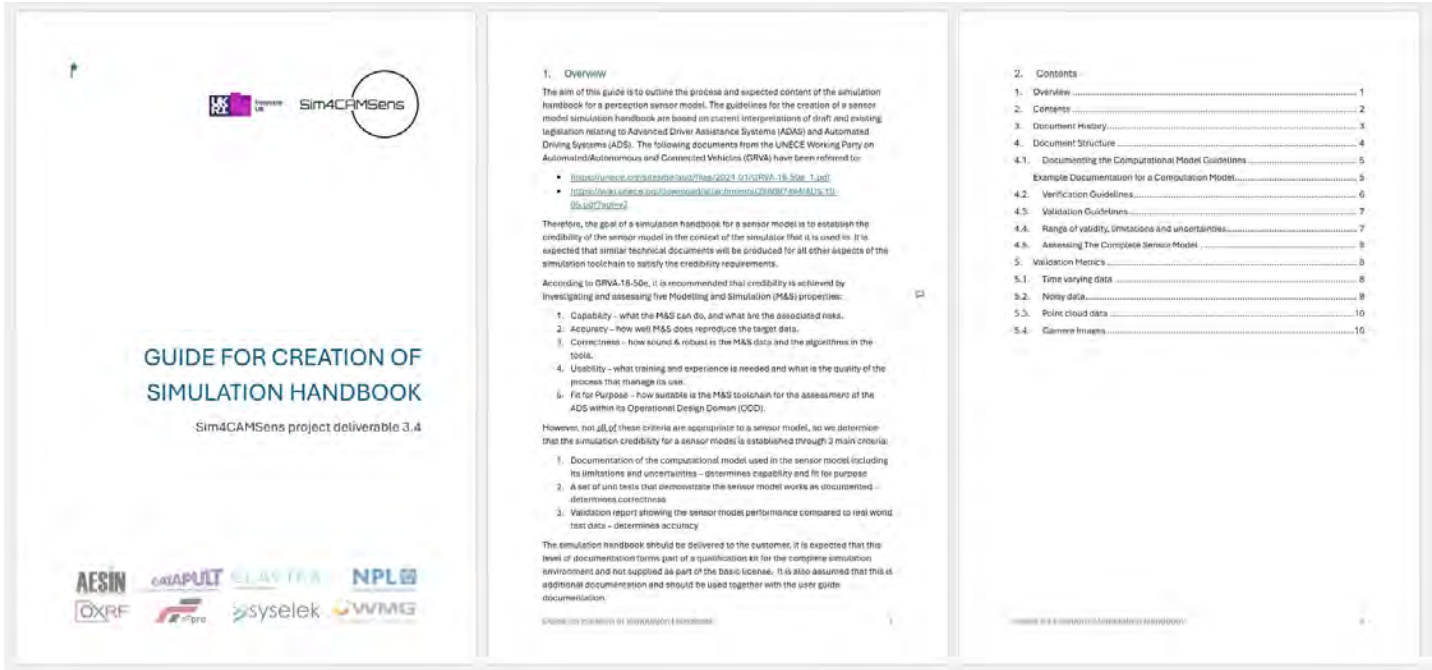
Dissemination Activities

- Project website at sim4camsens.org
  - Includes blog posts
- Simulation Handbook guidelines
  - Guidance to industry and regulators about what we believe should be included in the safety case to establish the credibility of the simulation toolchain
  - To be published in the next few weeks
- WP5 reports (AESIN lead)
  - Roadmaps and Standards Landscape
  - Recommendations Report on UK Perception Sensors



What's Next?

Sim4CAMSens2

– Currently ongoing – started July 2025 – March 2026

Upcoming InnovateUK & Horizon Projects

– All partners open to further projects

→ Particularly keen for end-users to complement real world testing with simulation solutions

Trustworthy AI & Validation for CAM Systems
15 October 2025

Leveraging AI Prediction Models to Improve Vehicle Behavior in Safety-Critical Situations

Emilia Silvas
Senior Scientist Integrated Vehicle Safety TNO
Associate Professor, TU Eindhoven

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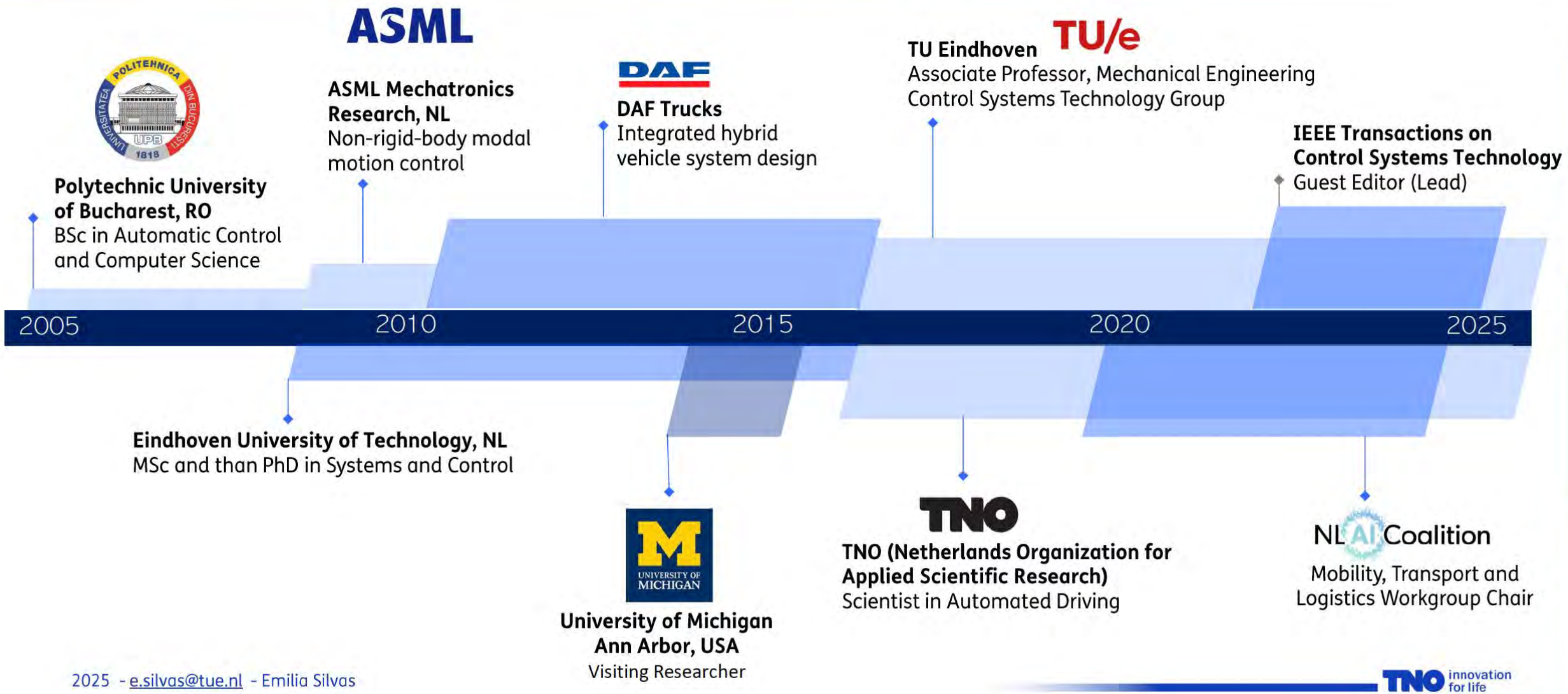
TNO innovation for life

Introduction: Professional Journey



Research Approach

TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

System design

Novel solutions

- Predictions
- External context
- Inner context
- Planning & decision making
- Predictive control

Moving System

Interactions / Context

Enhance autonomy, safety and efficiency

TNO innovation for life

TNO INTEGRATED VEHICLE SAFETY

APPLIED RESEARCH AT TNO FOR SAFE AUTOMATED DRIVING

Our vehicles

Streetwise pipeline

LargeScale Micro Simulations (LSMS)

Smart (digital) infrastructure

Driving Simulator

Limousine – Linear Motion Simulator

Desdemona

Streetlive box

TNO innovation for life

Smart Vehicles Innovation Focus at TNO

CCAM Technology development

Yard & Hub-to-hub automation

- Quality & Trust of Digital Infra-structure
- Accurate localisation

Public road automation

- AI for Safety
- Vehicle-road interaction
- Context aware motion planning

CCAM Safety assessment

Software centric

- Scenario based assessment
- Safety of AI

Human centric

- Safe & Social driving
- Driver Vehicle interaction

(Complete) V-cycle development (incl. architecture, safety case, world modelling, planning, control, testing and validation, etc..)

In-service monitoring

Smart Vehicles Innovation Focus at TNO

CCAM Technology development

CCAM Safety assessment

Yard & Hub-to-hub automation

Public road automation

Software centric

Human centric

- Quality & Trust of Digital Infra-structure
- Accurate localisation
- AI for Safety
- Vehicle-road interaction
- Context aware motion planning
- Scenario based assessment
- Safety of AI
- Safe & Social driving
- Driver Vehicle interaction

(Complete) V-cycle development (incl. architecture, safety case, world modelling, planning, control, testing and validation, etc..)

In-service monitoring

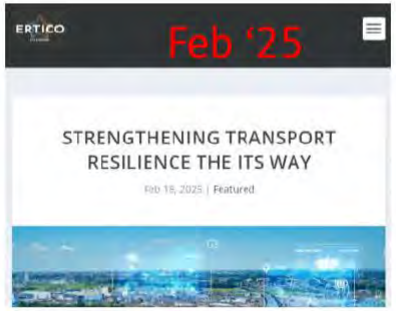
Outline

- Introduction: **EU Software Defined Vehicles** and **increased automation challenges**
- **Using AI models to improve safety**: motion and intention prediction
- **Design, Specify and verify AI models** – a system level perspective

Enhance competitiveness of EU's automotive industry & transport resilience

Draghi Report

Transition to a new Automotive Ecosystem → **Software Defined Vehicles**

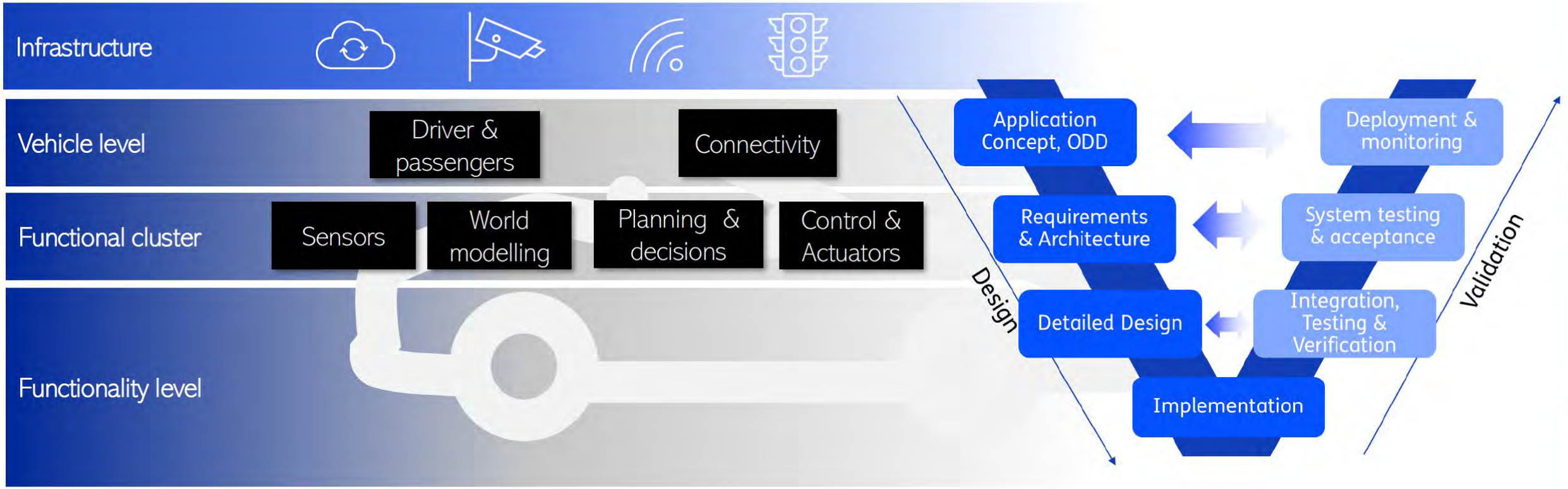


Building **resilient, adaptive EU transport systems** for future disruptions

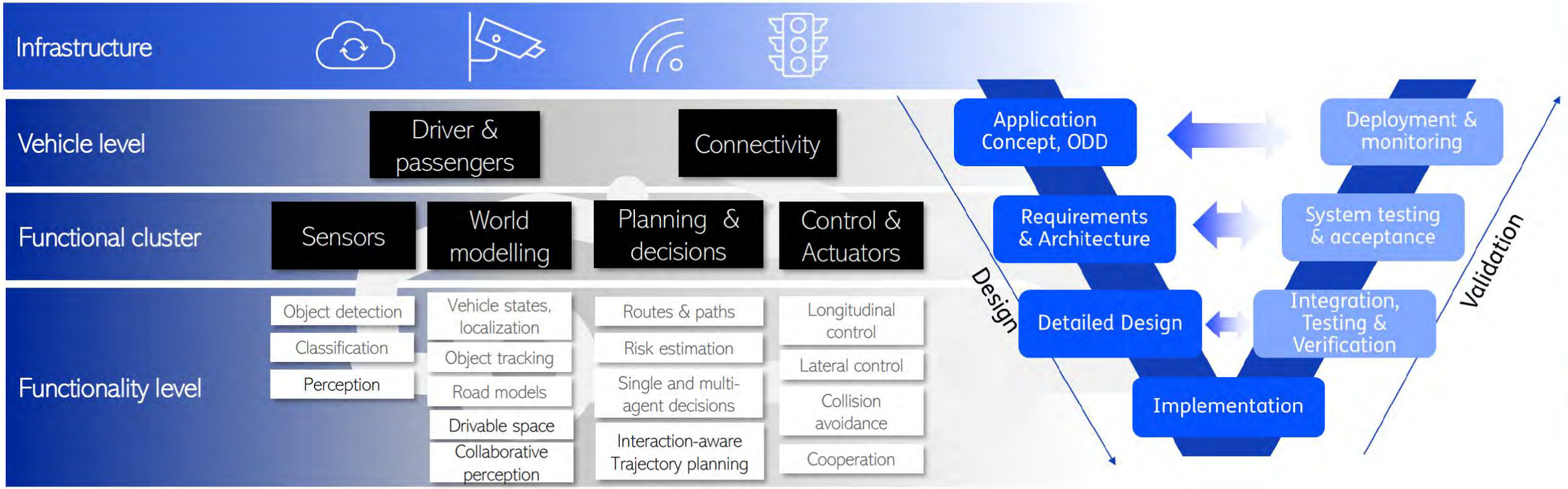
Europe **accelerates autonomous mobility**

+ EU Artificial Intelligence Act (AI Act) gradual implementation

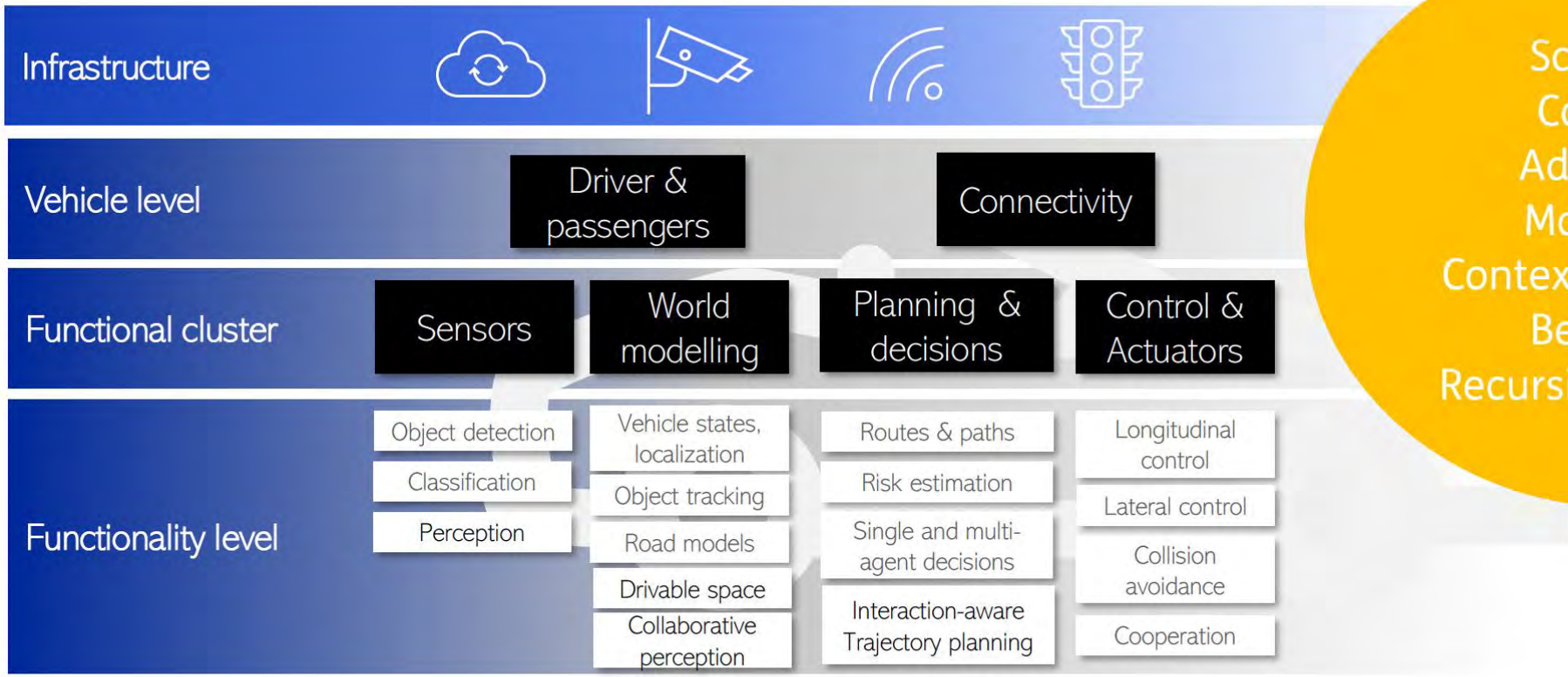
Automated Vehicle Functionalities



Automated Vehicle Functionalities

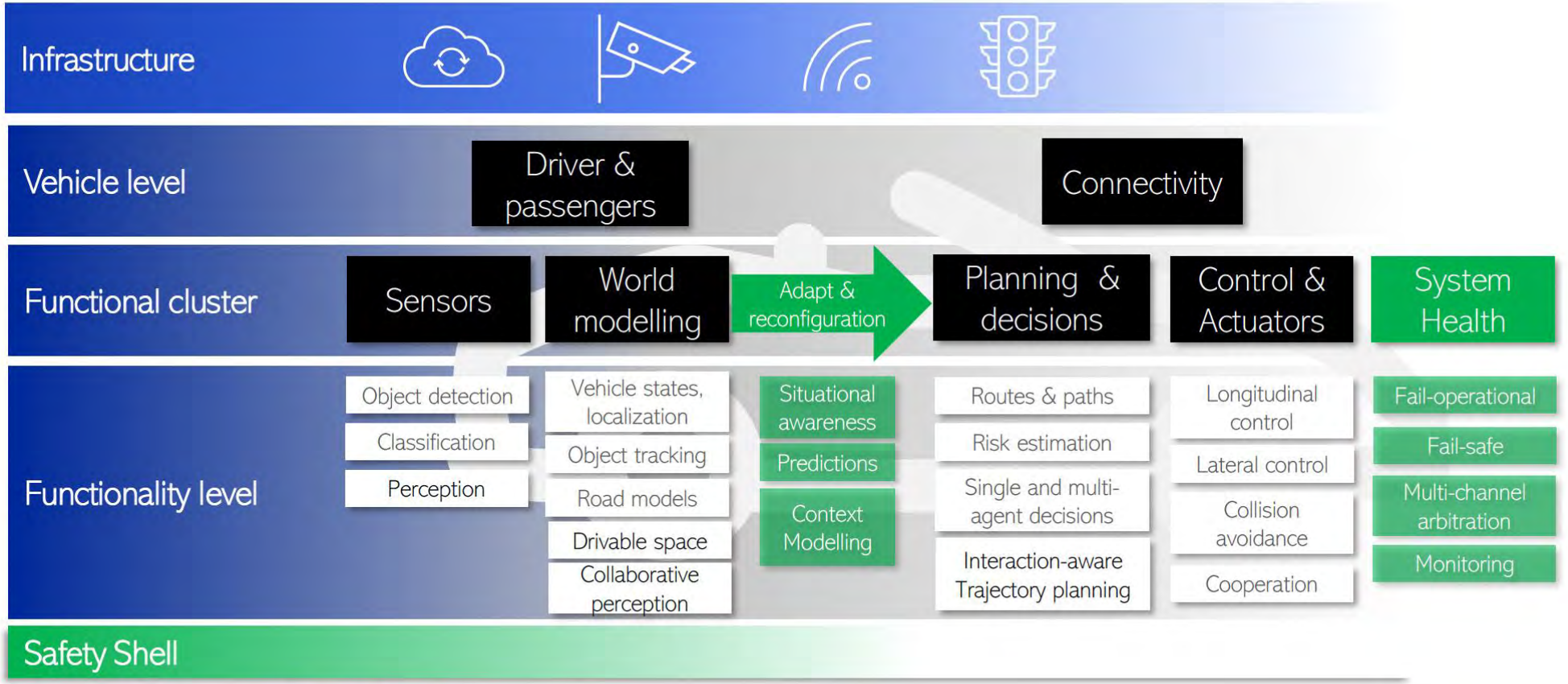


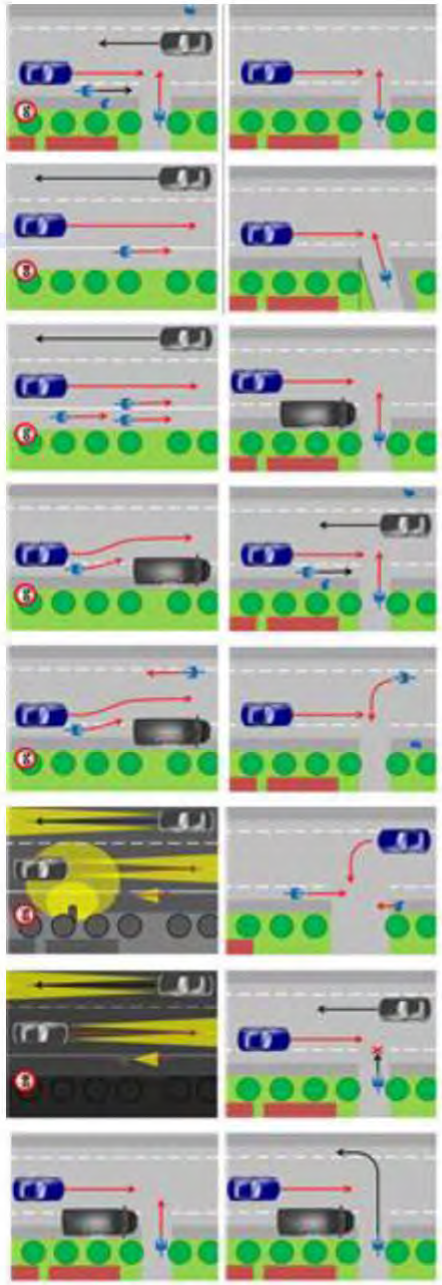
Automated Vehicle Functionalities



Scalability
Coverage
Adaptation
Modularity
Context-awareness
Behaviour
Recursive feasibility

Automated Vehicle Functionalities

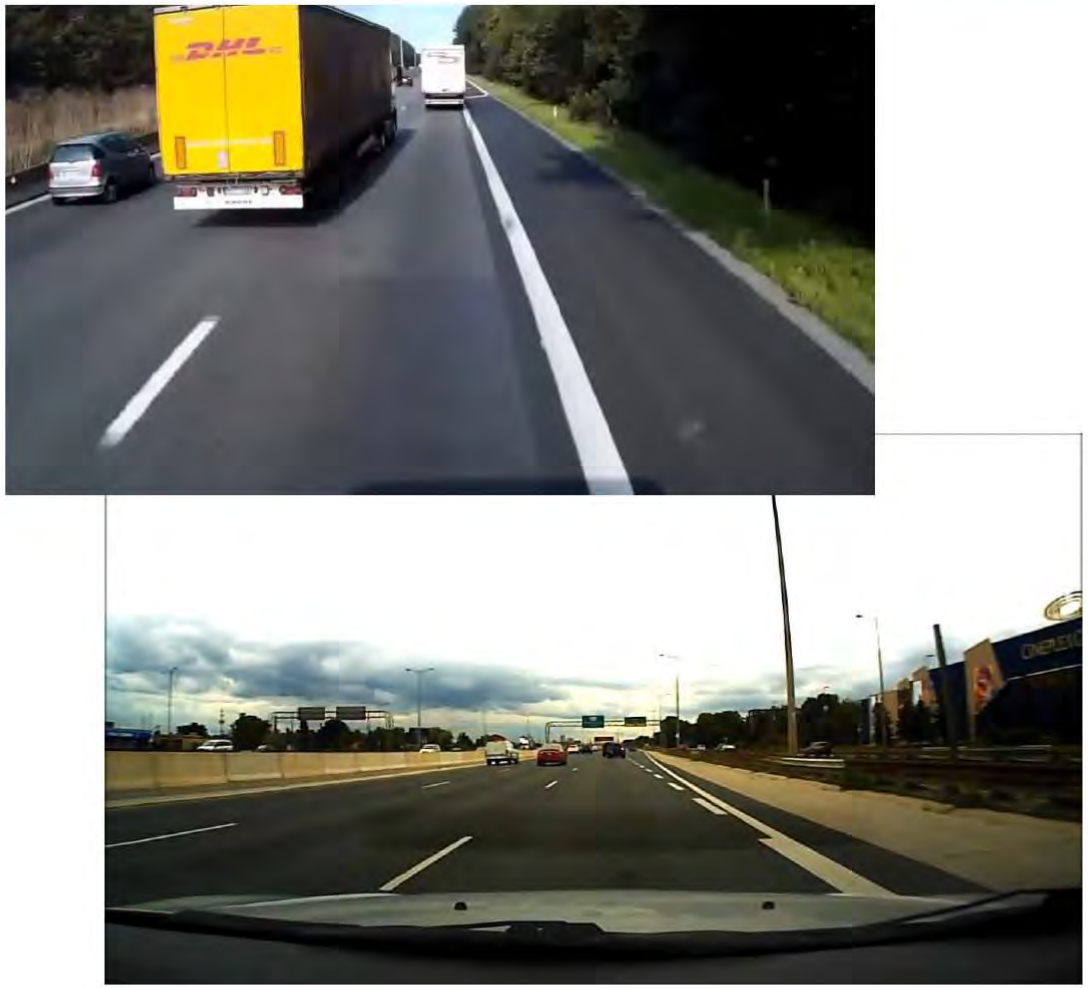




Leveraging AI Prediction Models to Improve Vehicle Behavior in Safety-Critical Situations

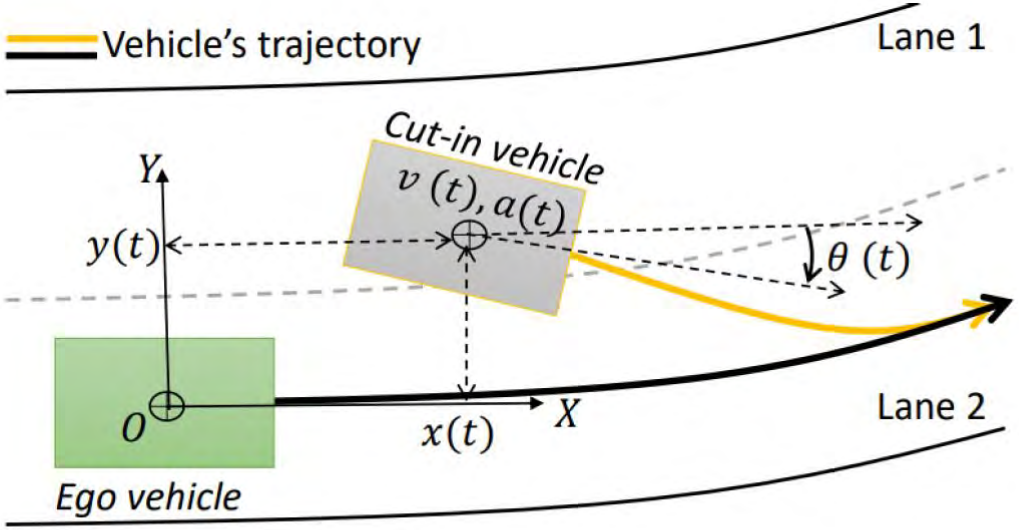
TNO innovation for life

Motion Trajectory Prediction

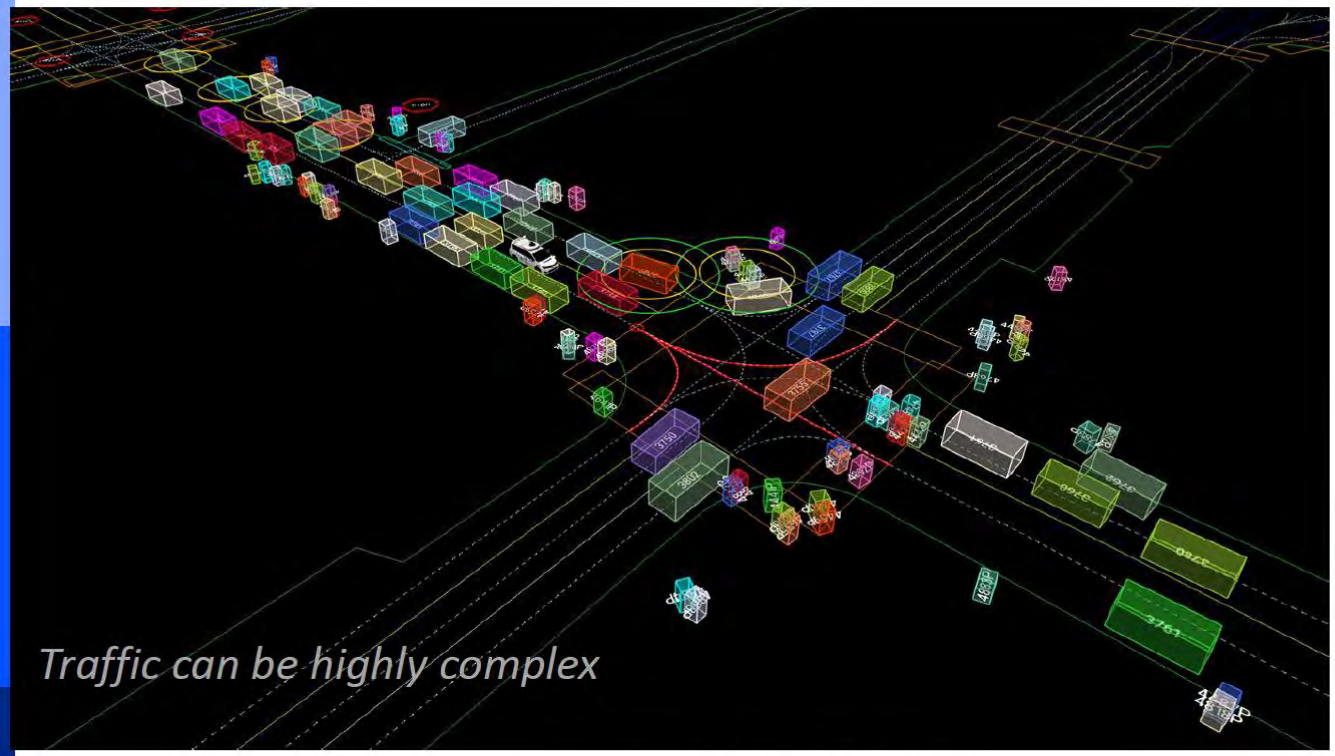


Can AI build **better models for (**V)RUs intention & motion prediction in safety critical scenarios (e.g. cut-ins)?

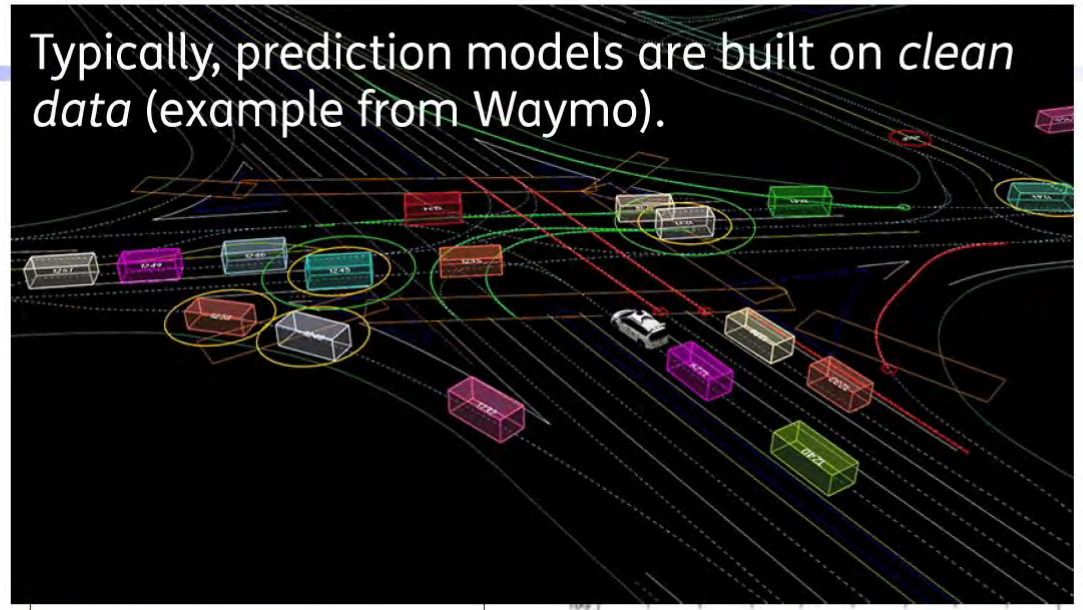
Can we avoid accidents?

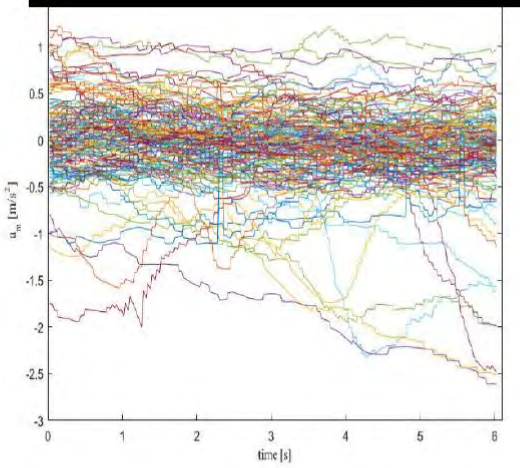


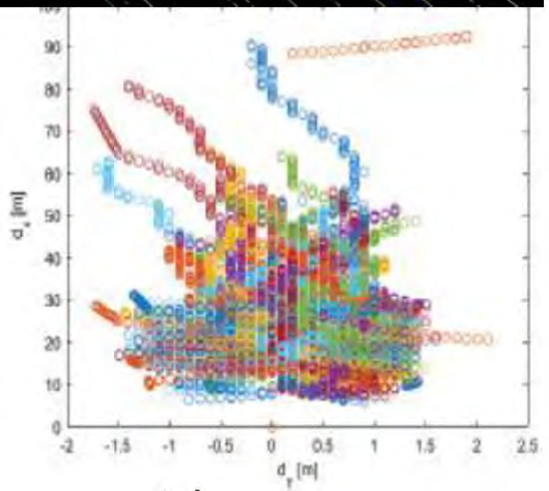
Motion Trajectory Prediction



- Misclassifications
- Inconsistent object tracking between multiple sensors
- Estimation/measurement error
- …

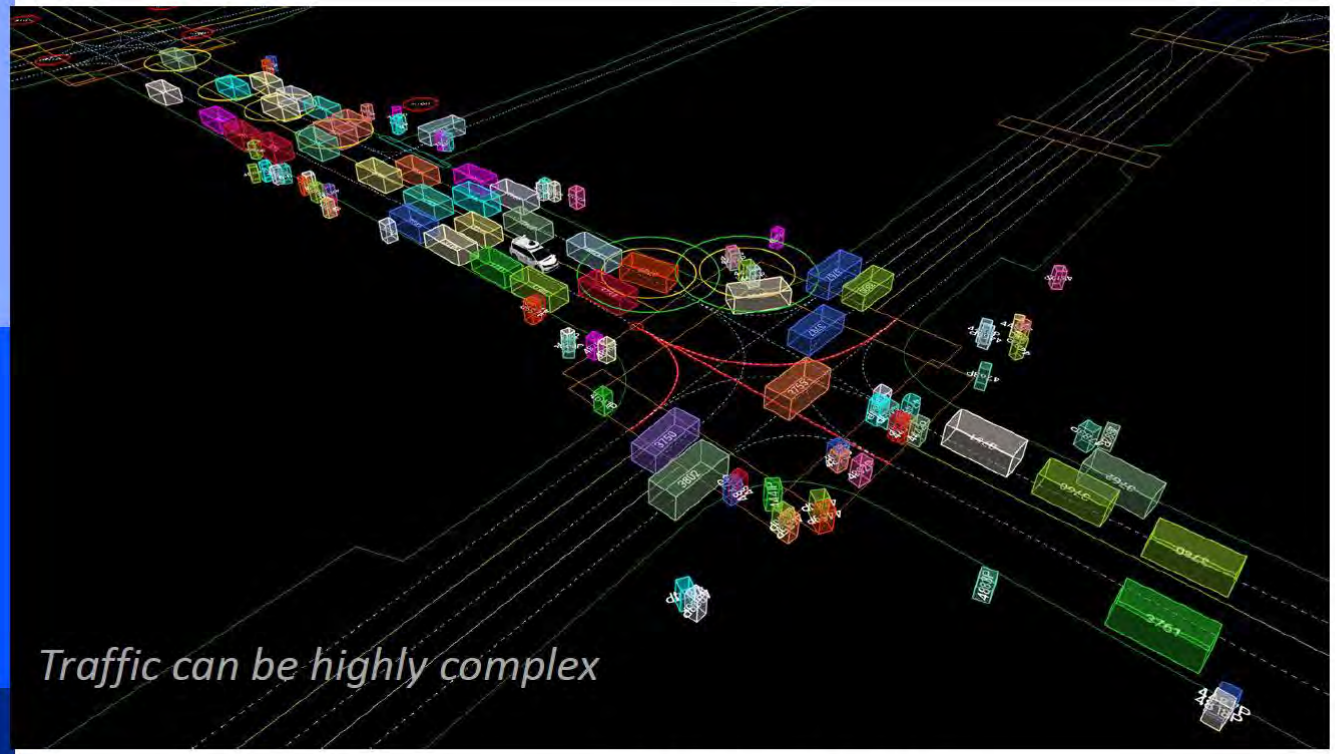






Real-world data is often not so ‘clean’.

Motion Trajectory Prediction



Traffic can be highly complex

- Misclassifications
- Inconsistent object tracking between multiple sensors
- Estimation/measurement error
- …

- Which objects are **relevant** to predict? Only those in **your region of driving interest** or should you have **regions of care**?
- Predict **trajectories** or **motion goals**?
- Predict **one** trajectory **or many** (most likely)?
- **How long** should you predict (horizon)? **How frequent**?
- Predict based **own sensor data** or use also **shared data**?

Motion Trajectory Prediction

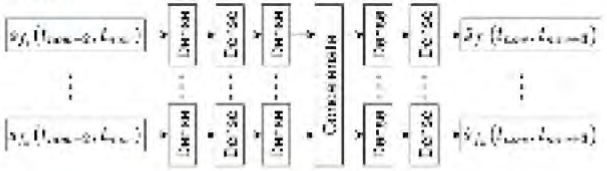
Model development ⟷ Model benchmarks ⟷ Real-time performance evaluation

Model benchmarks:
- Scenario based system level assessment

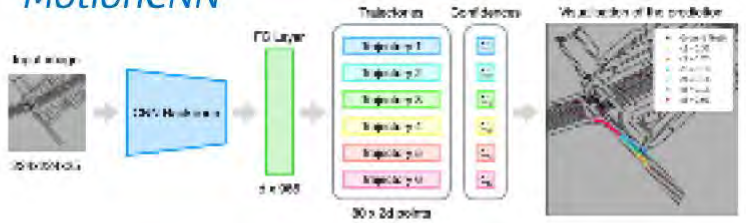
Real-time performance evaluation:
- Integration in risk estimation, motion planning and control

Looking into: Architecture, features, objectives, regularization, scalability, robustness, perturbations, validation, fit-for-purpose, environmental-awareness, trajectory update rate

MLP

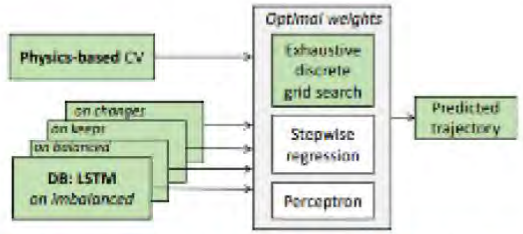


MotionCNN



MultiPath++

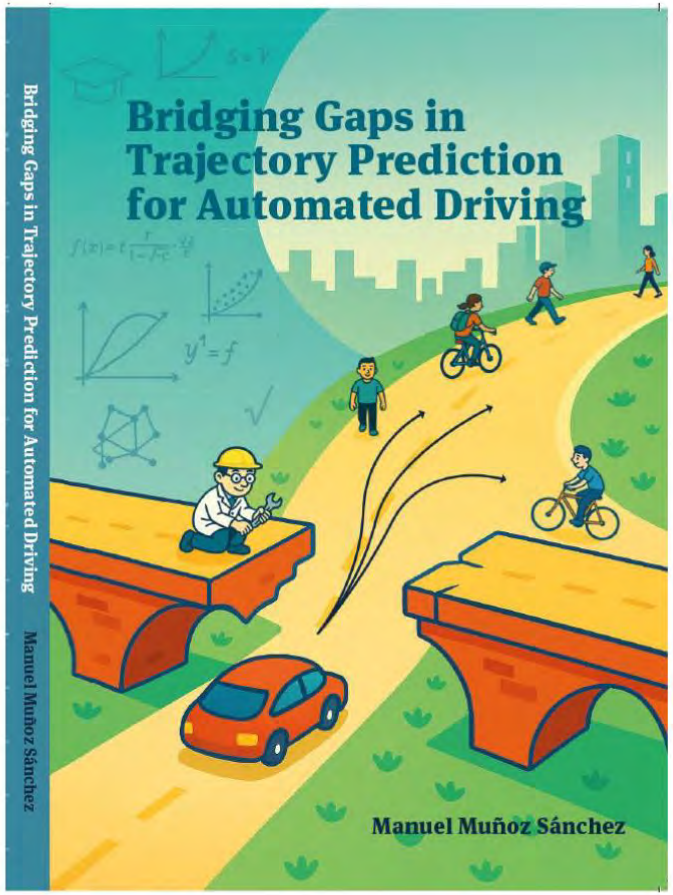
LSTM encoder-decoder



LiMTR [1] (adapted transformer)

1. C. Oerlemans et al. LiMTR: Time Series Motion Prediction for Diverse Road Users through Multimodal Feature Integration. To be presented at NeurIPS (Annual Conference on Neural Information Processing Systems) in December 2024. Code at https://github.com/Cing2/LiMTR
2. M. Muñoz Sánchez et al, Scenario-based Evaluation of Prediction Models for Automated Vehicles. IEEE Int. Conference on Intelligent Transportation Systems, 2022
3. M. M. Sánchez et al, Robustness Benchmark of Road User Trajectory Prediction Models for Automated Driving. IFAC World Congress 2023
4. M. M. Sánchez et al, Prediction Horizon Requirements for Automated Driving: Optimizing Safety, Comfort, and Efficiency. pp. 2575-2582, In IEEE Intelligent Vehicles Symposium, Korea, 2024

Motion Trajectory Prediction: bad weather, occlusions



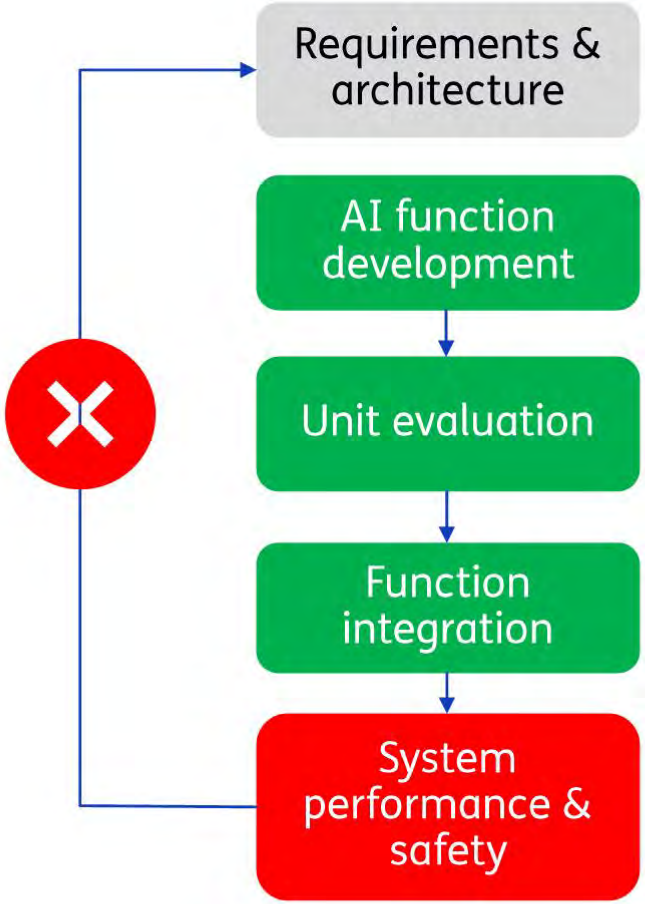
[1] C. van der Ploeg, R. Smit, A. Teerhuis and E. Silvas, Long Horizon Risk-Averse Motion Planning: A Model-Predictive Approach, Int. Conference on Intelligent Transportation Systems (ITSC), pp. 1141-1148, 2022.

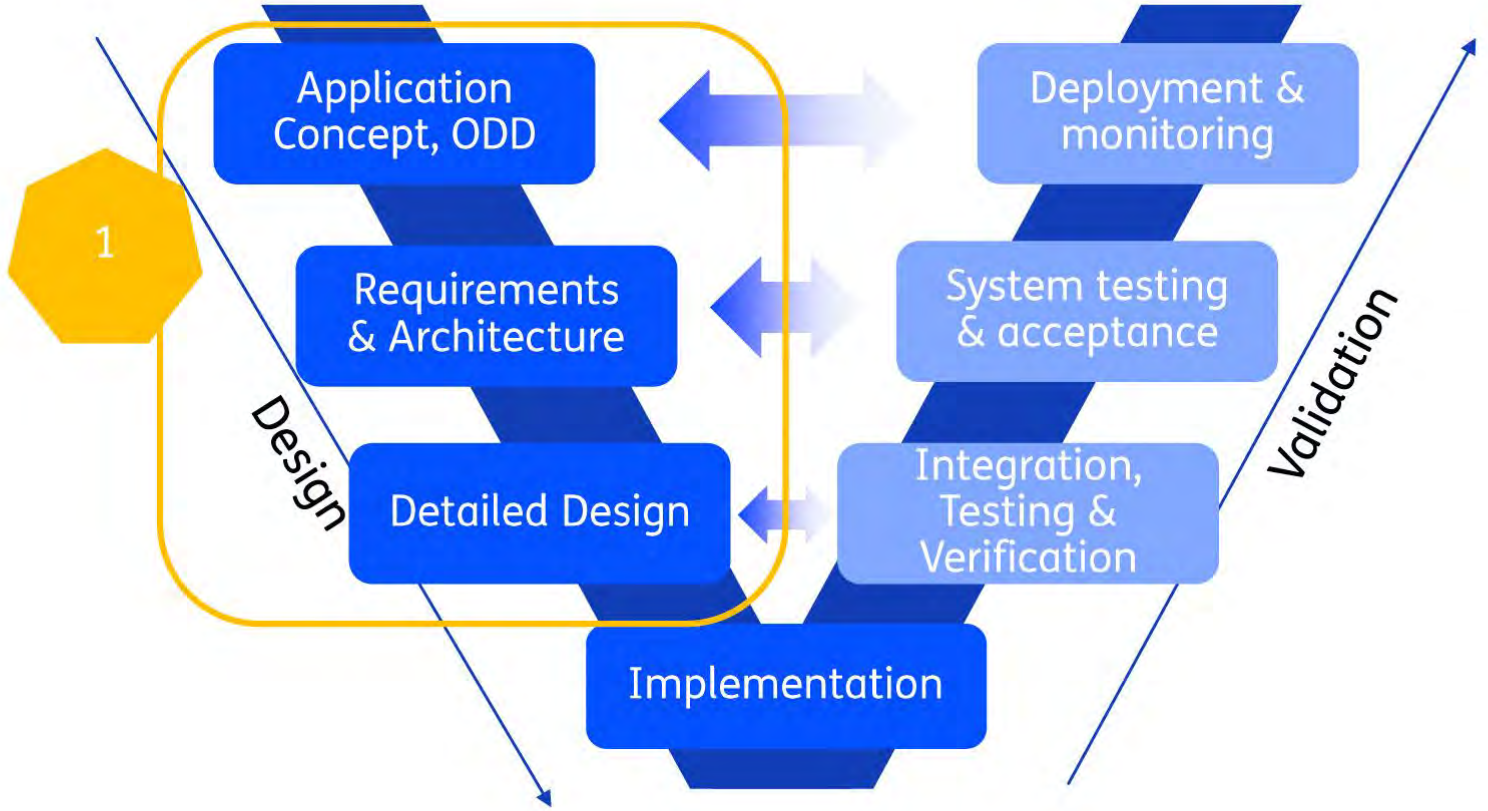
Movie example: https://www.youtube.com/watch?v=SjPPo1OMHc8

Design, Specify and verify AI models – a system level perspective

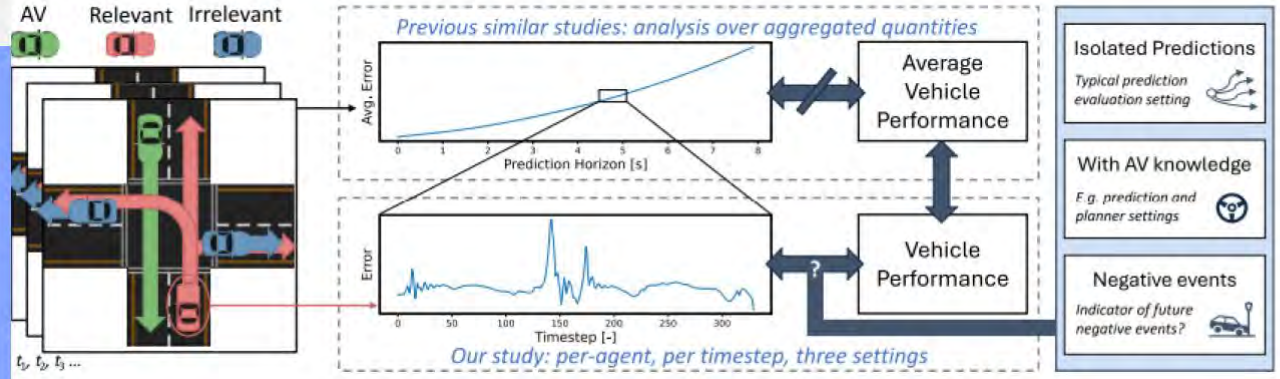
TNO innovation for life

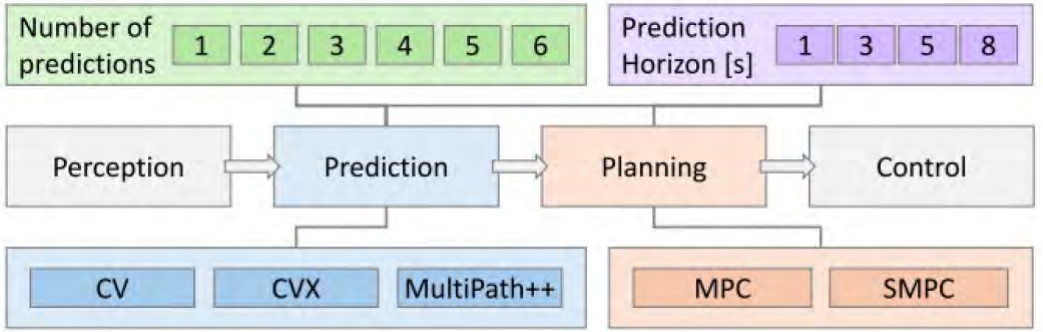
AI-based functions and their design



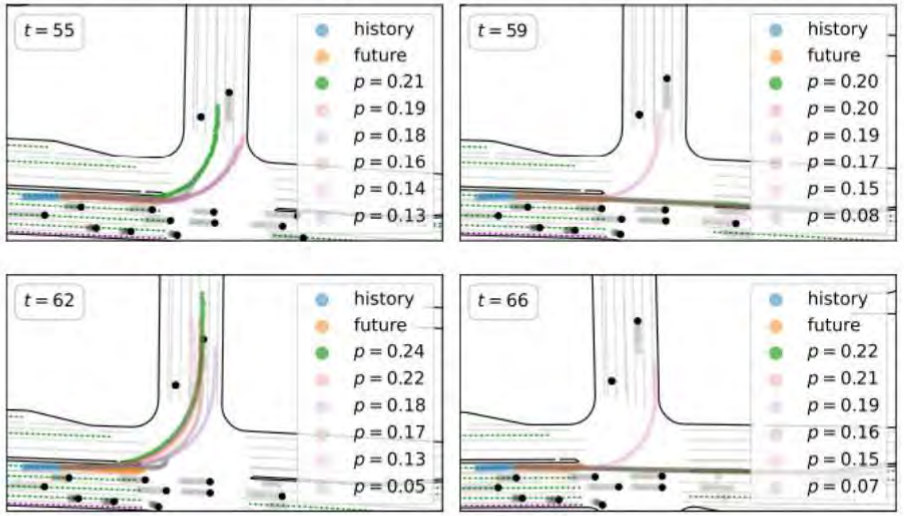


AI Co-design Design Framework





Ex: temporal consistency usually not addressed by designers:



AI Design Framework for Motion Prediction

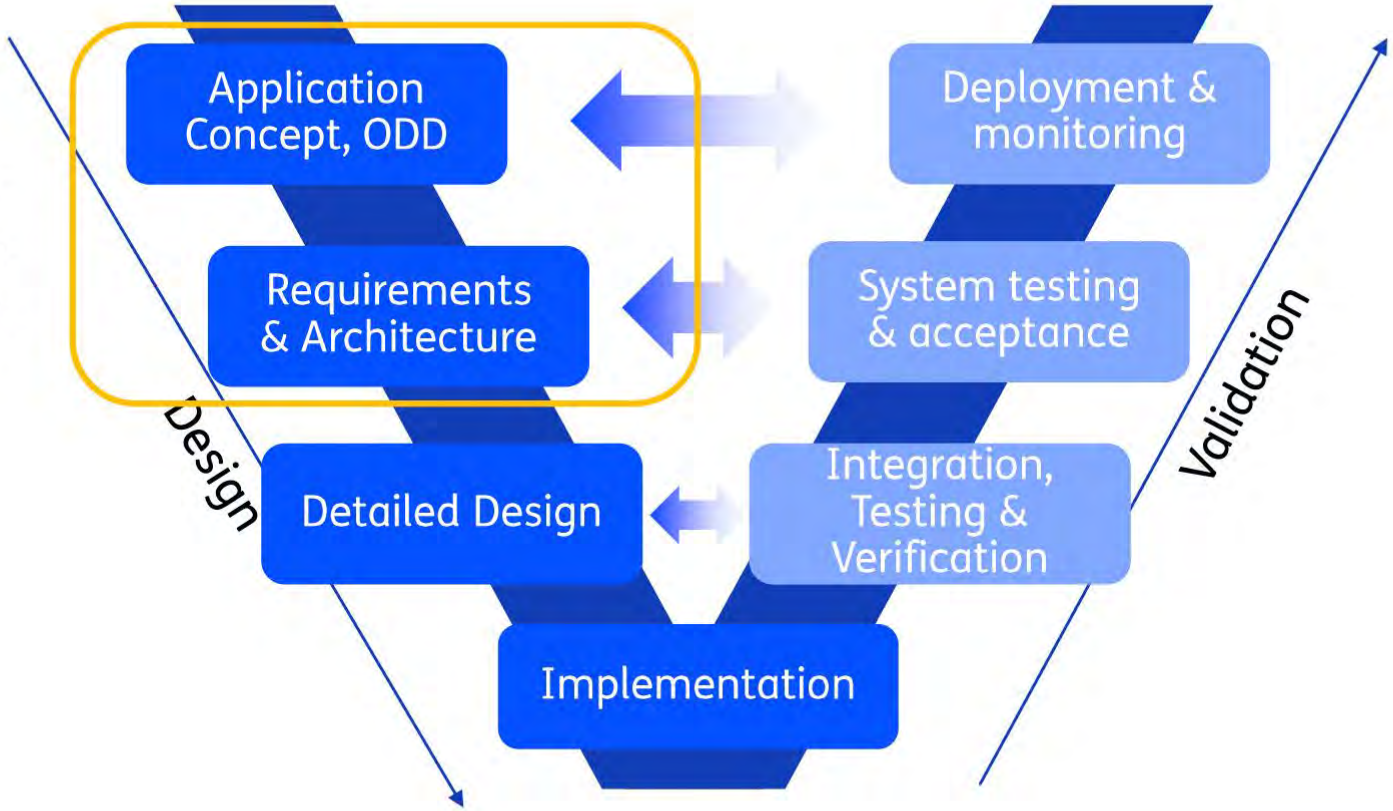
- Combined AI models with system-level KPIs to guide function design.
- Evaluated performance metrics to derive design requirements.
- **Urban safety**: 1.6 sec predictions are sufficient for crossing pedestrians.
- **Driving comfort**: Requires longer horizons (5–15 sec).
- **Highway safety**: <2 sec predictions improve cut-in response.
- **Constraints**: Computational limits restrict testable horizons.
- **Challenges remain**: Safety guarantees, temporal consistency, system stability.

Systems Engineering and Lifecycle Management of AI-based systems

2

Seamless Early Research Program

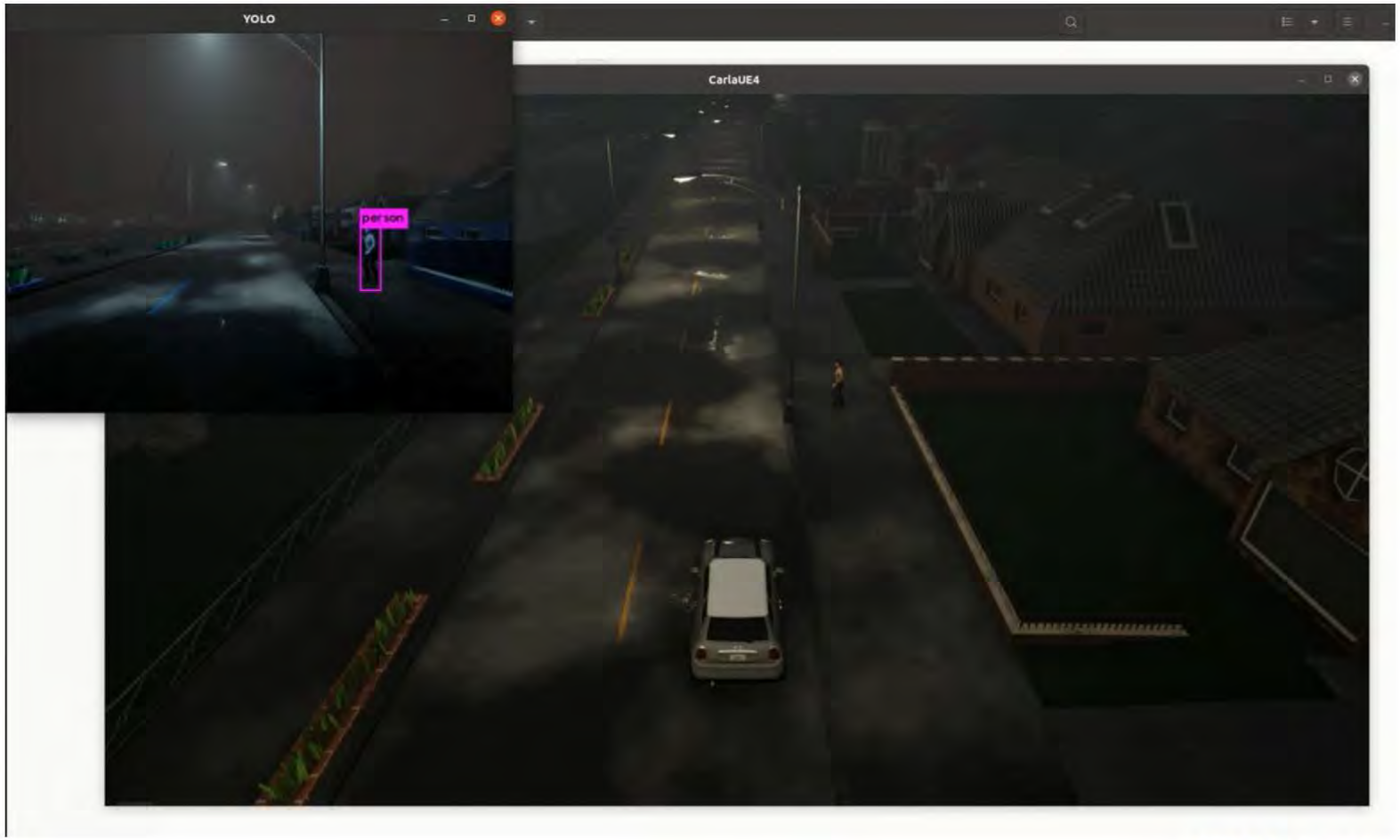
For assessing SOTIF & Functional Safety of camera perception



Systems Engineering and Lifecycle Management of AI-based systems

2

Seamless Early Research Program: architecting, diagnosis, V&V and lifecycle management of AI-based systems



Systems Engineering and Lifecycle Management of AI-based systems

2

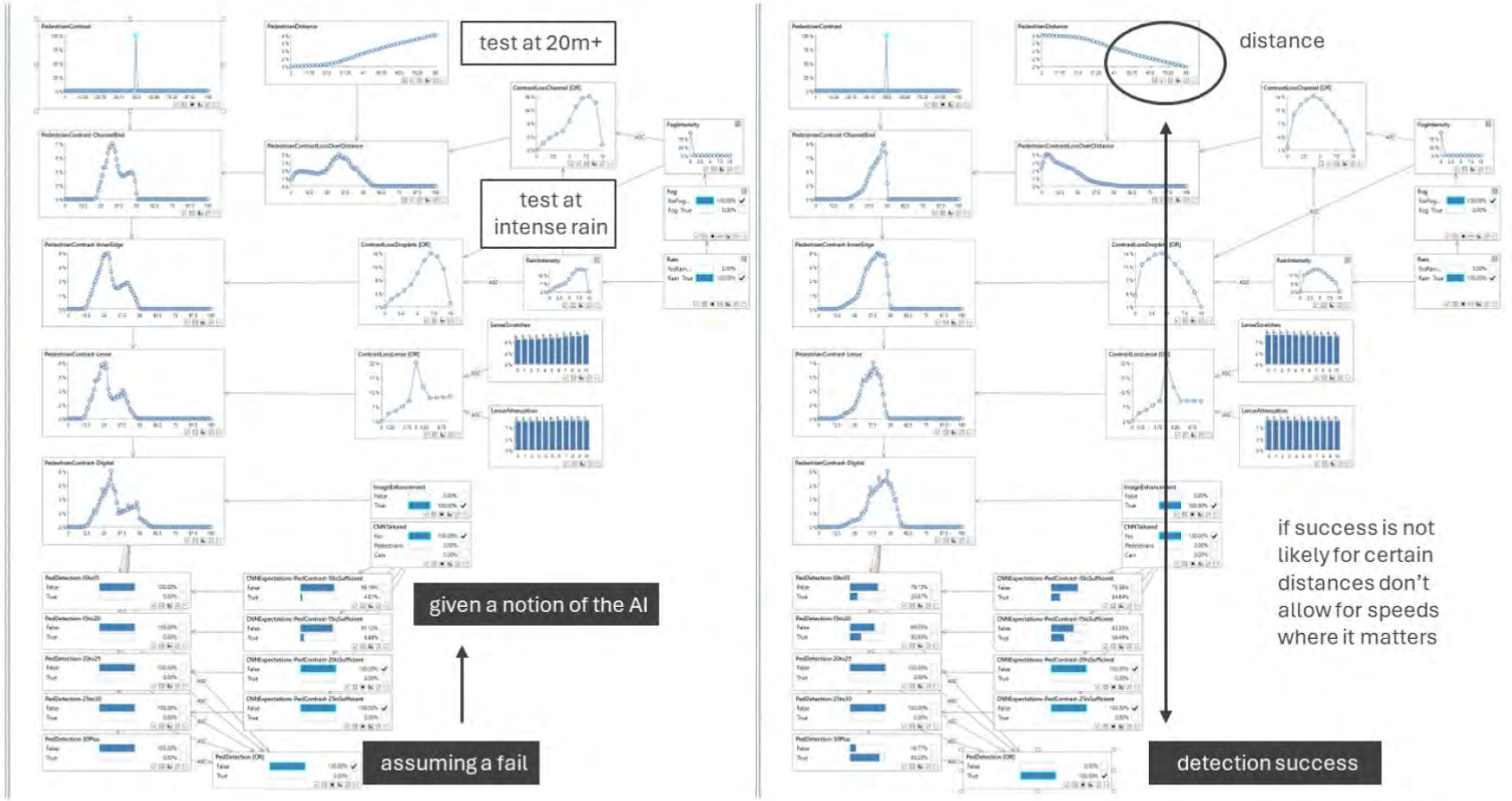
Seamless Early Research Program: architecting, diagnosis, V&V and lifecycle management of AI-based systems

- Causal information flow modeling allows criticality analysis of the OD impact on the AI system
- Making the long tail of rare but critical scenarios visible in the risk analysis by modeling the full probabilistic influence of the ODD on system behavior
- Domain monitoring
- Fitness-for-Purpose assessment of AI-based systems (identify criticality)

Systems Engineering and Lifecycle Management of AI-based systems

2

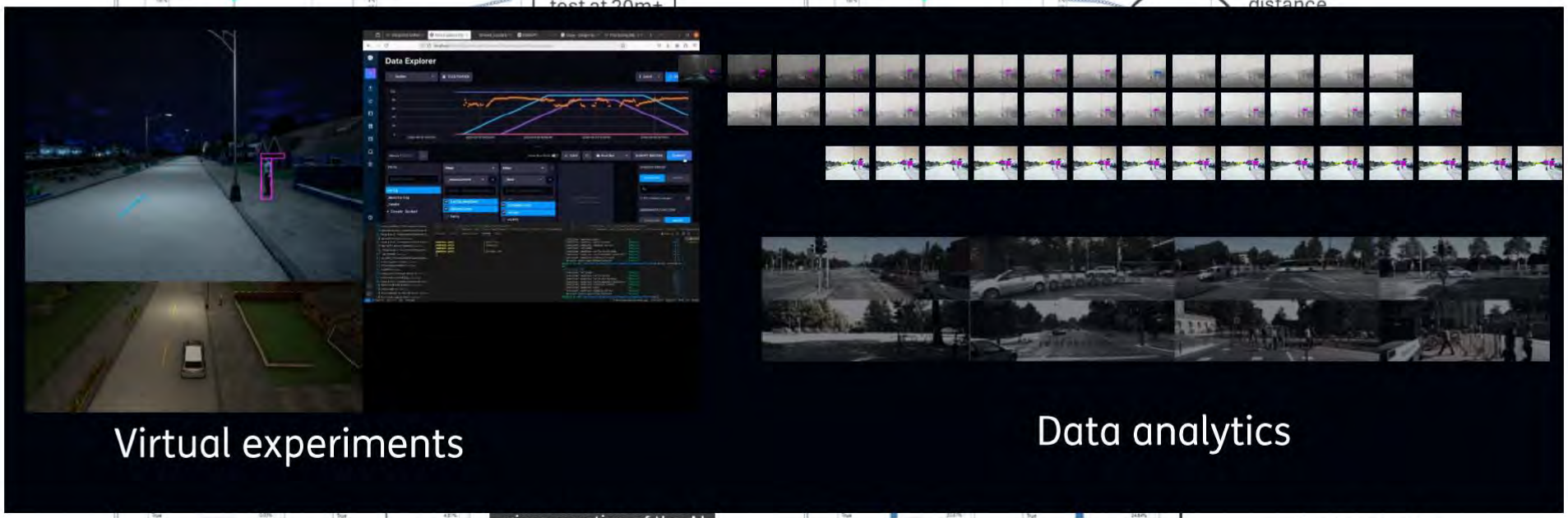
Seamless Early Research Program: architecting, diagnosis, V&V and lifecycle management of AI-based systems



Systems Engineering and Lifecycle Management of AI-based systems

2

Seamless Early Research Program: architecting, diagnosis, V&V and lifecycle management of AI-based systems

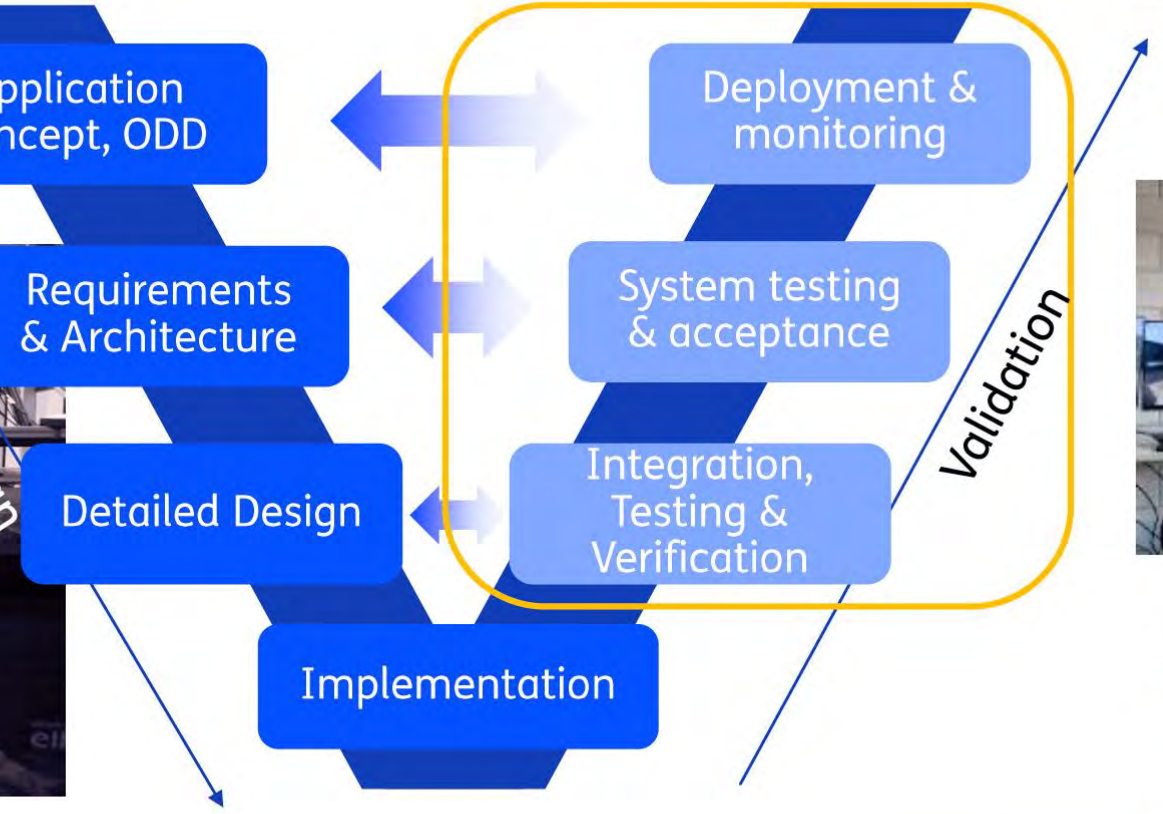


Validation and Verification of Physical AI Systems

MARQ

3

State of the art facilities for modular and fast prototype testing

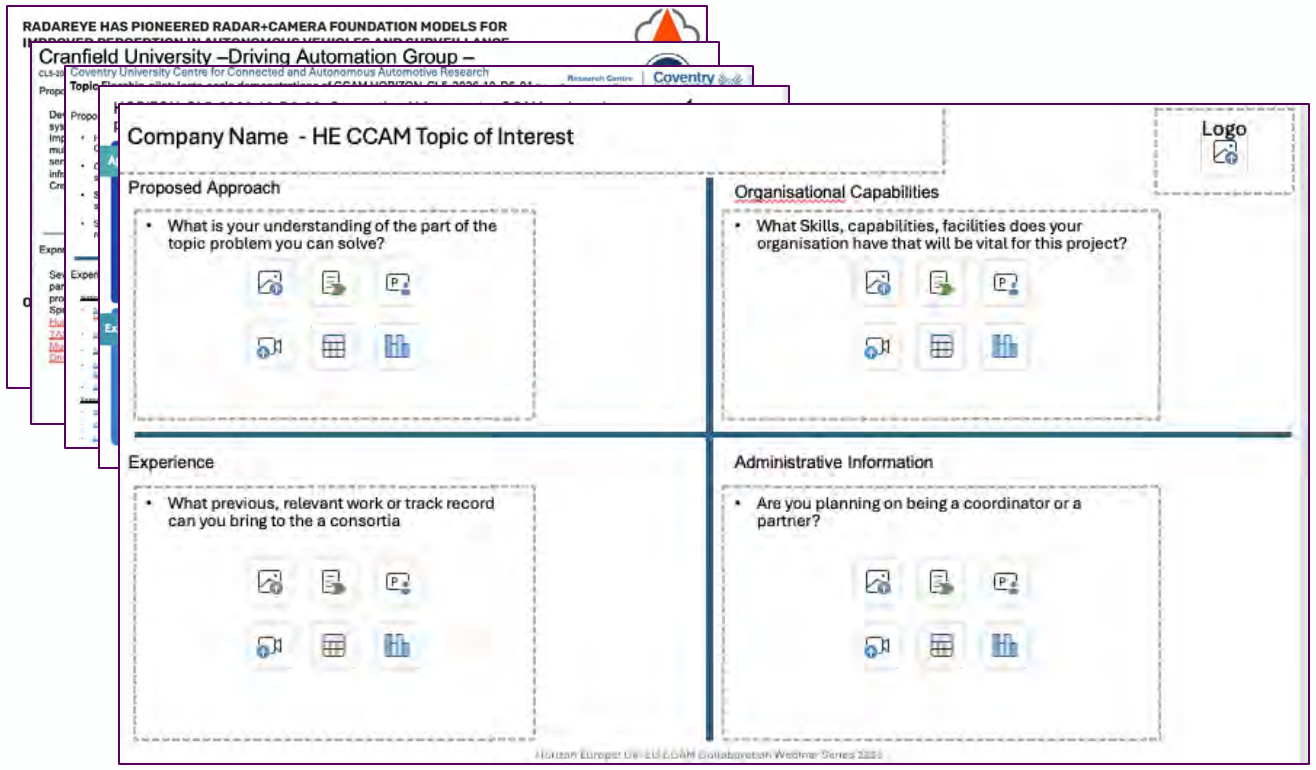


Thank you!

Emilia Silvas, PhD
Senior Scientist Integrated Vehicle Safety TNO
Associate Professor TU/e

Emilia.silvas@tno.nl

Pitching



TEMPLATE : https://custom-eur.cvent.com/1EEE3F7178EC486E8926B23F55A0B125/files/1713637ffebd4beb969054c22a864269.pptx

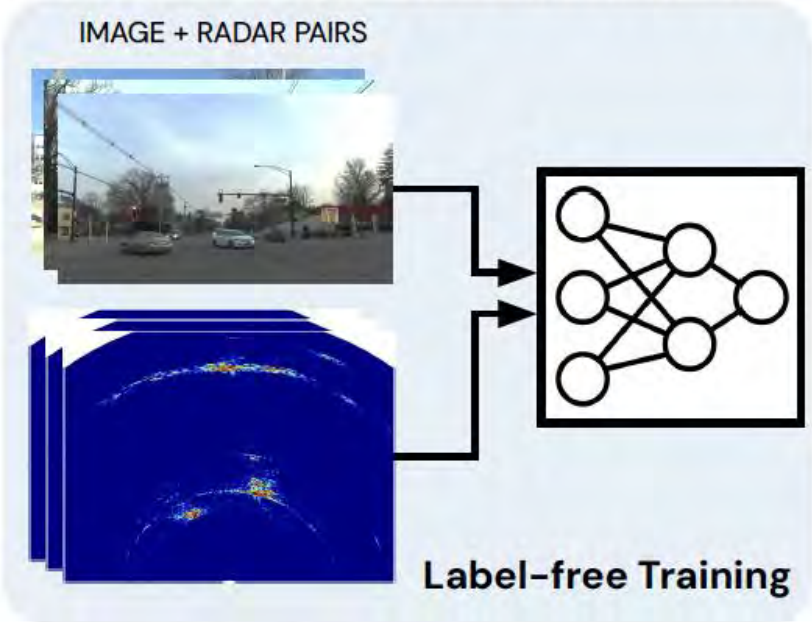
Anthony Gallego
Automated Mobility Knowledge Transfer Manager
Innovate UK | Business Connect

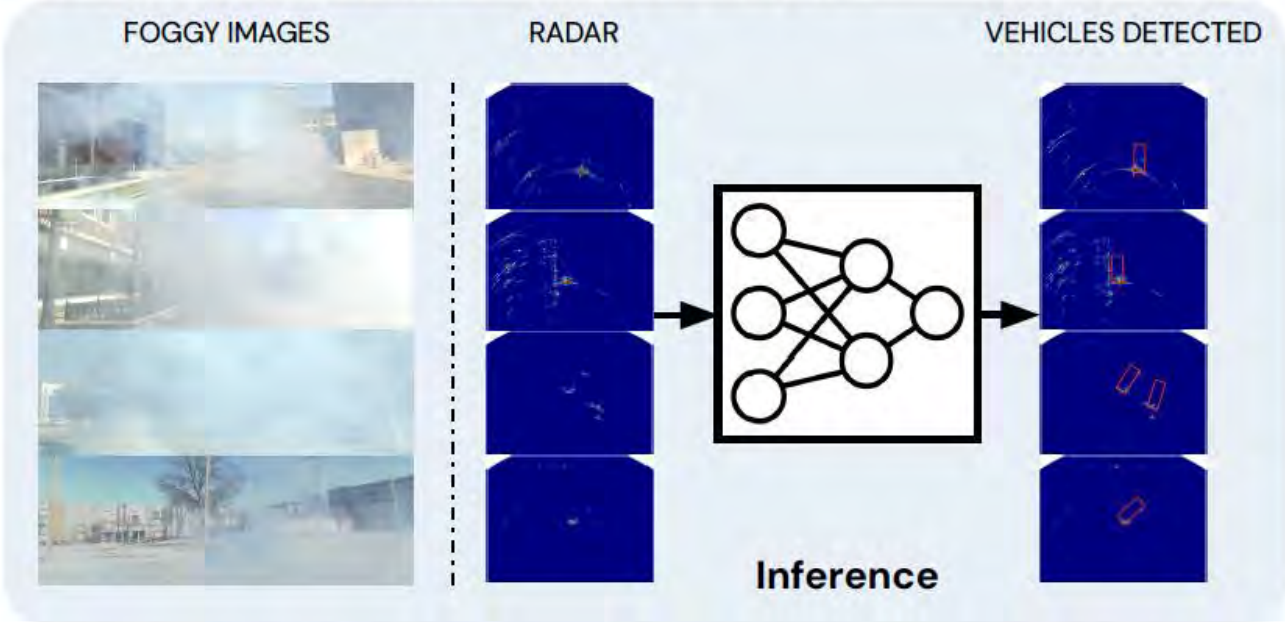
Anthony.Gallego@iukbc.org.uk

Submit your 1 page pitch decks! To be included in the digital brochure we will compile at the end of this series!

Innovate UK | Business Connect

RADAREYE HAS PIONEERED RADAR+CAMERA FOUNDATION MODELS FOR IMPROVED PERCEPTION IN AUTONOMOUS VEHICLES AND SURVEILLANCE





Radar generally has superior performance in inclement weather compared to cameras and lidar - it retains its ability to detect objects in bad weather like fog, rain, snow, etc.

We have built a **foundation model** that is able take the radar data and recognise the patterns that represent vehicles.

The output of our model is the detection and position of other vehicles.

OUR TECH HAS MULTIPLE ADVANTAGES

1. All weather
2. Light & compact
3. Cheaper hardware
4. Near-Zero labelling

CCAM TOPIC

Generative AI for smarter CCAM: enhancing perception, decision-making, and validation

Contact: mo@radareye.ai

HORIZON-CL5-2026-10-D6-03: Generative AI for smarter CCAM: enhancing perception, decision-making, and validation

DLR Institute for AI Safety and Security

Approach

Develop **harmonised guidelines/requirements and/or assessment tool(s)** to integrate GenAI into CCAM perception and decision-making in line with the **AI Act** & **GenAI Code of Practice**.

Design **ELSA approaches for VRU** safety & scenario generation (e.g. transparency, human oversight, bias detection) to **complement technical testing & validation**.

Experience

LOKI

DiVe

V&V4NGC
Methoden, Prozesse und Werkzeugketten für die Validierung & Verifikation von Next Generation Car

++

- Multidisciplinary ELSA expertise (ethical, legal, social)
- ELSA self-assessment based on the AI Act (transferable to CCAM)
- Regulatory/soft-law requirements → practical guidance
- Direct focus on AI in safety-critical mobility domains
- Automotive, rails, aviation
- Close link to technical departments

Capabilities

Admin

Partner (ethics, users)
Germany
999981731
Deutsches Zentrum für Luft- und Raumfahrt
sofia.kyrampalidou@dlr.de

Heriot-Watt University - Generative AI for smarter CCAM/Holistic solutions for CCAM integration /European CCAM knowledge hub and tools

Proposed Approach

- Long-tail scenario generation for testing CCAM
- Runtime safety validation of CCAM
- Safety evaluation of CCAM
- Explainability of CCAM
- Driving behavior modeling/Trajectory generation

Organisational Capabilities

- Expertise in GAI, criticality metrics, counterfactual reasoning and driving behavior modeling
- Tool chain for drone-based dataset recording and processing
- Various scaled autonomous mobile robots
- Strong connections with our affiliated Edinburgh Centre for Robotics and The National Robotarium

Experience

- We are one of partners in the EU project AEROSUB (€12m), aiming for safe and trustworthy robots
- We are an international team with wide connections from OEM, suppliers and automotive research institutes from Germany, Spain and UK
- We were involved in the well-known projects for CCAM, such as PEGASUS and VVM projects

More details

Administrative Information

- We can be a strong partner contribute to the topics related to safety and trustworthiness of CCAM

Contact

Dr. Cheng Wang. Assistant Professor, Heriot-Watt University, UK

Agility3 - HORIZON-CL5-2026-10-D6-03:

Generative AI for smarter CCAM: enhancing perception, decision-making, and validation

Proposed Approach

- CCAM perception, decision making and validation requires a vast library of simulated scenes, visual content and scenarios to train, and importantly, to validate systems across a statistically diverse range of scenarios.
- We propose using a combination of:
  - Large Language AI models – to read and understand CCAM test and validation scenarios from the growing existing databases
  - Traditional 3D modelling techniques – to create specific content
  - Procedural generative 3D modelling – to construct scenes
  - Latest generative video AI tools – to create photorealistic synthetic data and variety in scene appearance

...to create an **automated pipeline for generating a vast resource of scenario-based visual data** to challenge, improve and ultimately validate CCAM systems for safe operation.

Organisational Capabilities

- Research & R&D – Project managing, organization & execution
- Requirements definition
- 3D Content creation, Blender, OpenUSD, NVIDIA DriveSim & Omniverse, Unreal Engine etc.
- Content, scene and data attribution, i.e. surface material type
- Sensor simulation – Camera RGB, point cloud, depth map
- 3D scene / content / map creation for various driving simulator platforms
- New rendering tools and technologies, e.g. Gaussian Splats
- Procedural 3D scene creation, data generated visuals, scene randomisation

Experience

- Previous Innovate UK R&D Partner – Digital Twin project
- NVIDIA Supplier & Technology Partner
- Many examples of creating 3D content, 3D scenes, visuals and synthetic data for the automotive industry
- Ongoing R&D activities to understand latest relevant technologies
- Note – this is a fast-paced area of technology, the state-of-the-art and our experience will develop significantly between now and the project starting.

Administrative Information

We're looking to join a consortium as a partner, bringing our specialist expertise to support the wider goals of training and validating safe CCAM.

Contact:
david.turner@agility3.co.uk
01438 488066 / 07956 822419
https://www.agility3.co.uk

Oxford RF Ltd

HORIZON-CL5-2026-10-D6-01
HORIZON-CL5-2026-10-D6-03

Proposed Approach

- 5D Networked Automotive Radar Product
- Use of higher-order data inputs (3D position + 2D velocity vector) to enable the measurement of sudden vehicle manoeuvres and sudden changes in pedestrian direction.
- Reduce the compute requirement through embedding the target dynamics on the road in each frame of data
- Significantly reducing the reliance on multiple frames of data to estimate critical object motion
- 5-7X faster vehicle and pedestrian motion prediction compared with existing perception methods

Organisational Capabilities

- Advance radar sensors for ADAS/ADS
- Coherent networked sensors for high-resolution and sudden change measurement
- Sensors for software-defined vehicle architecture

Experience

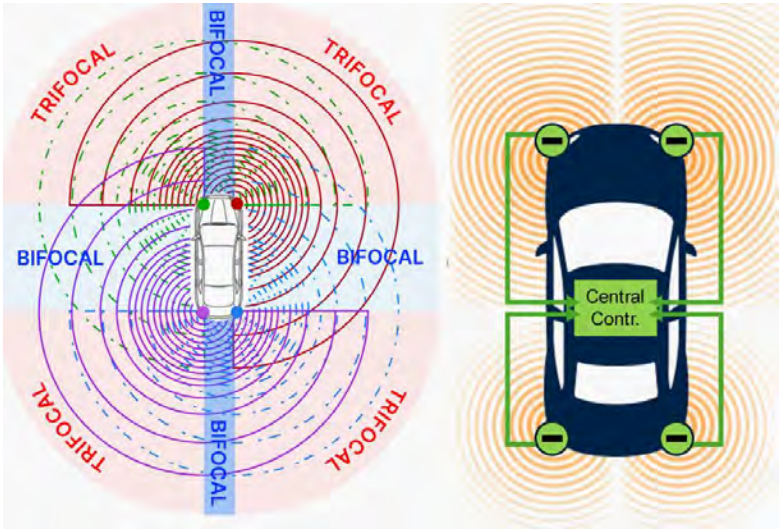
Several individual and collaborative projects with leading partners in the automotive ecosystem including:

- The Advance Propulsion Centre's Mobilise Programme
- Zenzic CAM Scale Up and Exploitation Programmes
- CCAV CAM Supply Chain Project: **Sim4CAMSens** (£3.2M)
- CCAV Pathfinder 1 Enhancements Project: **Sim4CAMSens2** (£1.5M)

Administrative Information

Looking to be a partner.

Dr Kashif Siddiq
kashif.siddiq@oxrf.co.uk
Ms Aasma Abid
aasma.abid@oxrf.co.uk
PIC 888936616



Thank you and Reminder

22nd of October 2025 , 12pm GMT

https://iuk-business-connect.org.uk/events/horizon-europe-uk-eu-ccam-collaboration-webinar-series-2025/

Anthony Gallego
Automated Mobility Knowledge Transfer Manager
Innovate UK | Business Connect

Anthony.Gallego@iukbc.org.uk

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