MOBILYSIS

Drone swarms to understand mobility dynamics

Jasso Espadaler Clapés
Senior Data Scientist and Transportation Engineer

info@mobilysis.ch

The problem

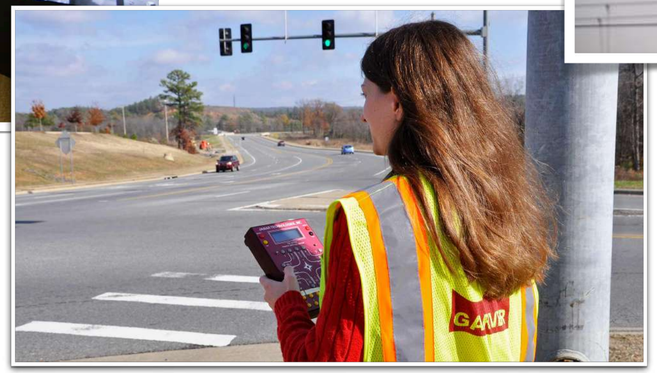
Urban mobility has become an extremely complex problem

Various transportation options and stakeholders | Technology integration | Multiple data providers

Each driver loses 18 working days every year stuck in their car.

$305 billions are lost in the US & up to 3 billions CHF in Switzerland.

Car-centric, old generation equipment cannot adapt to the cities' mobility needs in the 21st century.



Who we are

EPFL spin-off

Dr. Manos Barmpounakis
Co-Founder & CEO

Prof. Nikolas Geroliminis
Co-Founder & Scientific Advisor

Dr. Taylor Mordan
Senior Computer Vision Engineer

Our mentors

Simon Johnson
Business Consultant & Drone Expert

Frédéric Dreyer
Innovation & Ecosystem Manager

Accounting | HR | Payroll

Maximum Value Sarl

Dr. Dimitris Tsitsokas
Senior Data Scientist and Transportation Engineer

Jasso Espadaler Clapés
Senior Data Scientist and Transportation Engineer

Oriol Pascual Anglès
Junior Data Scientist

Business Dev. Manager

December 2024

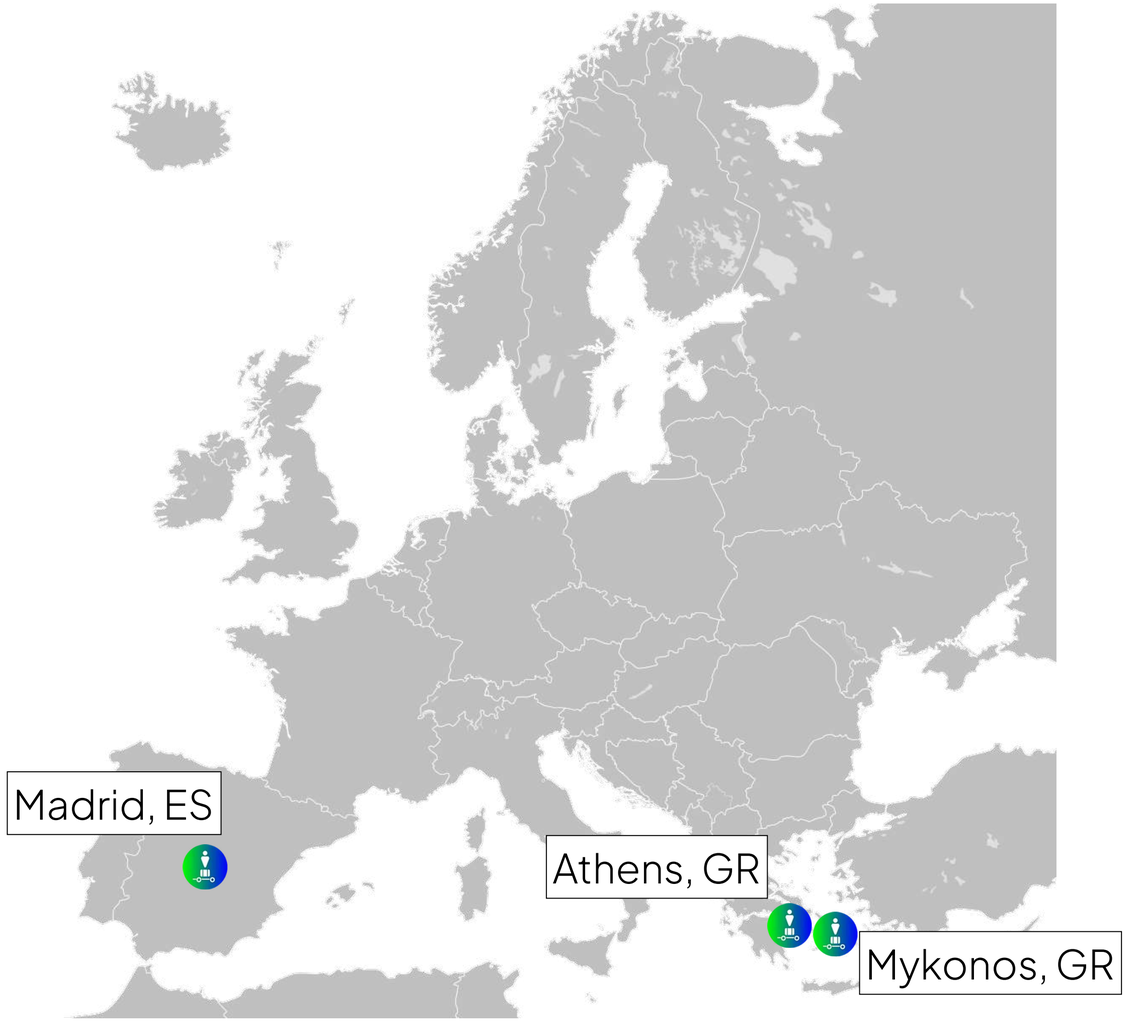
HEU projects

DELPHI

feDerated nEtwork of pLatforms for Passenger and freigHt Intermodality

Focus on the strategic dimension of integrating **passenger and freight** transport in a **single federated system**.

MobiLysis is leading WP4 in which the focus is on **predictive modelling, optimization and decision support**.



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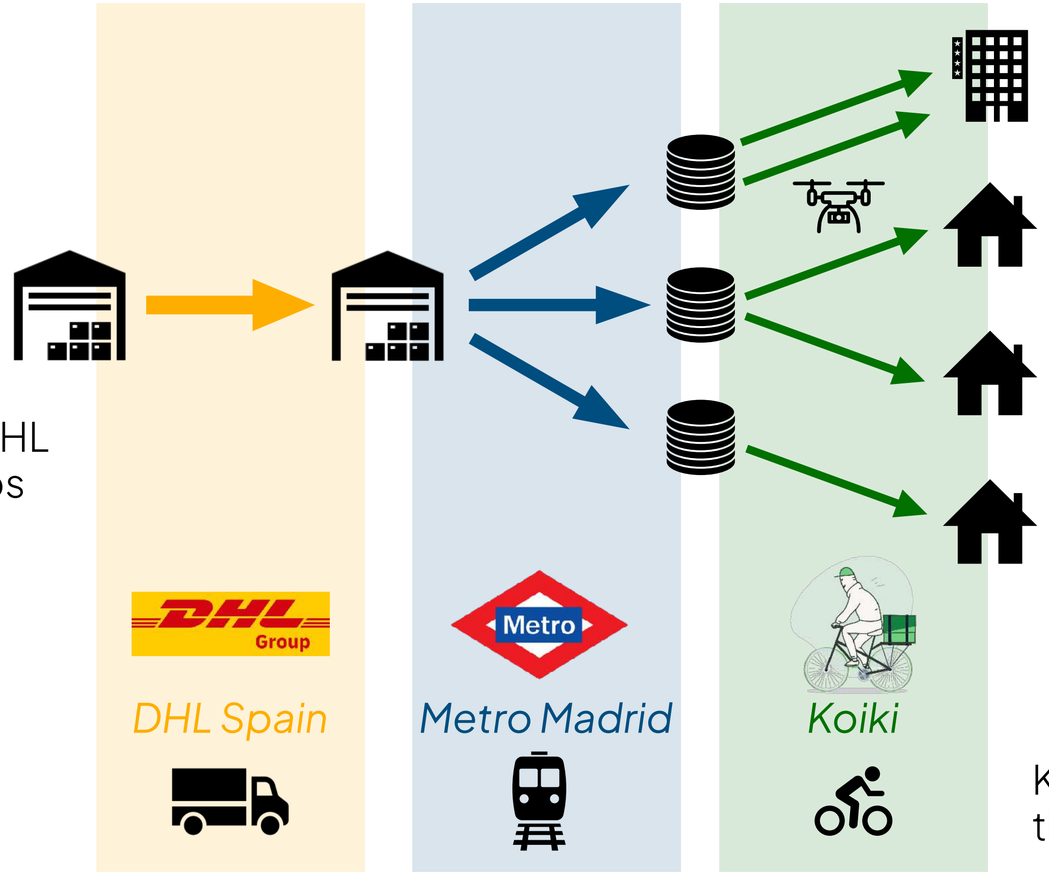
DELPHI

Madrid Pilot (ES)

Parcels are transported from DHL packaging center to micro-hubs **using the metro** of Madrid.



Drones to monitor the last mile delivery and to provide best route recommendations (**AI-based optimisation**).

Koiki **couriers (bike or foot)** deliver the packages to the end users.

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ACUMEN

AI-aided de**C**ision tool for seamless m**U**lti**M**odal n**E**twork and traffic manageme**N**t

A generic, privacy-preserving, data-driven, modular digital paradigm for **advanced network management**.

The main role of MobiLysis is the collection of data in the **Helsinki** and **Athens** pilots.

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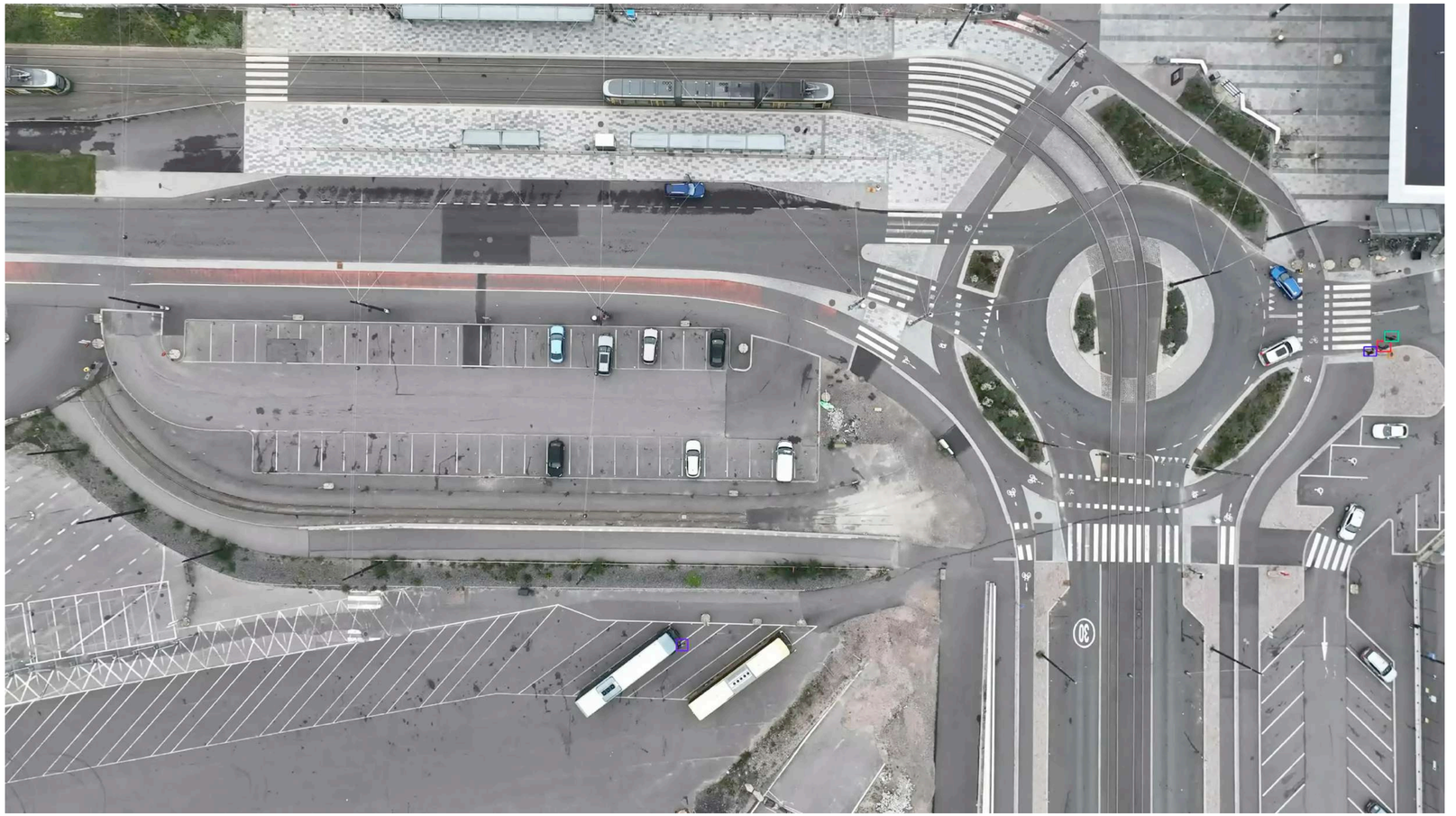
ACUMEN

Privacy-friendly pedestrian tracking for improving sustainability, Port of Helsinki (FI)



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METACCAZE

Accelerate the deployment of **smart systems** that combine electric, automated and connected technologies and infrastructure **enabling zero-emission shared mobility services** for both passengers and goods in European cities.

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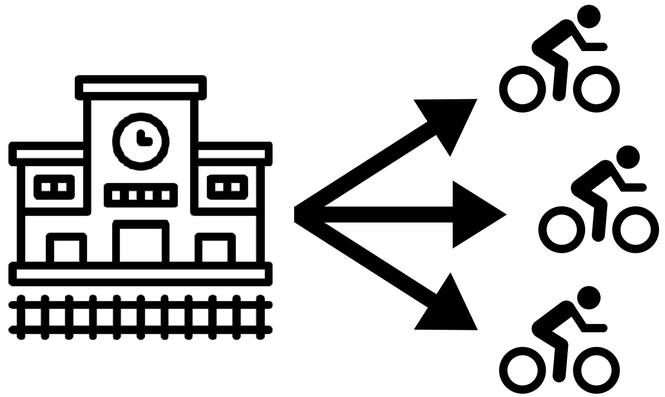
METACCAZE

Promotion of sustainable measures for train passengers, Kraków (PO)

Renovated train station

Kraków Główny



What is the bicycle use?

Can we promote sustainable measures for train passengers?

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iDriving

Intelligent & **D**igital **R**oadway **I**nfrastructure for **V**ehicles **I**ntegrated with **N**ext-**G**en Technologies

Improve road safety and infrastructure by developing an **Enhanced Safety Criteria Catalogue** (SCC).

Use **AI to analyze road user behaviour**, identify maintenance needs, provide real-time environmental hazard alerts, and create **3D AI-driven representations** for enhanced safety and maintenance.

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Our past and future

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