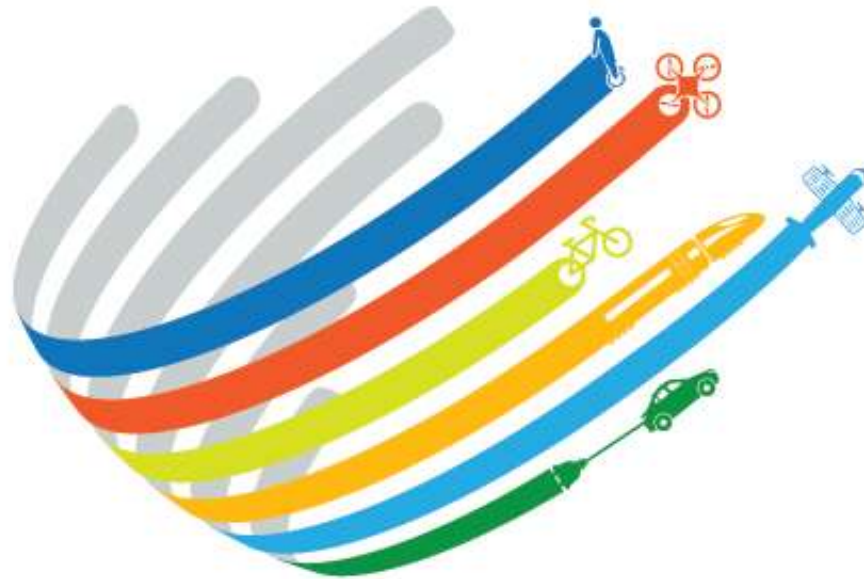


European Transport Innovation Challenge 2017



[#eutransportinnovator](#)

ec.europa.eu/transport/themes/research/challenge_en



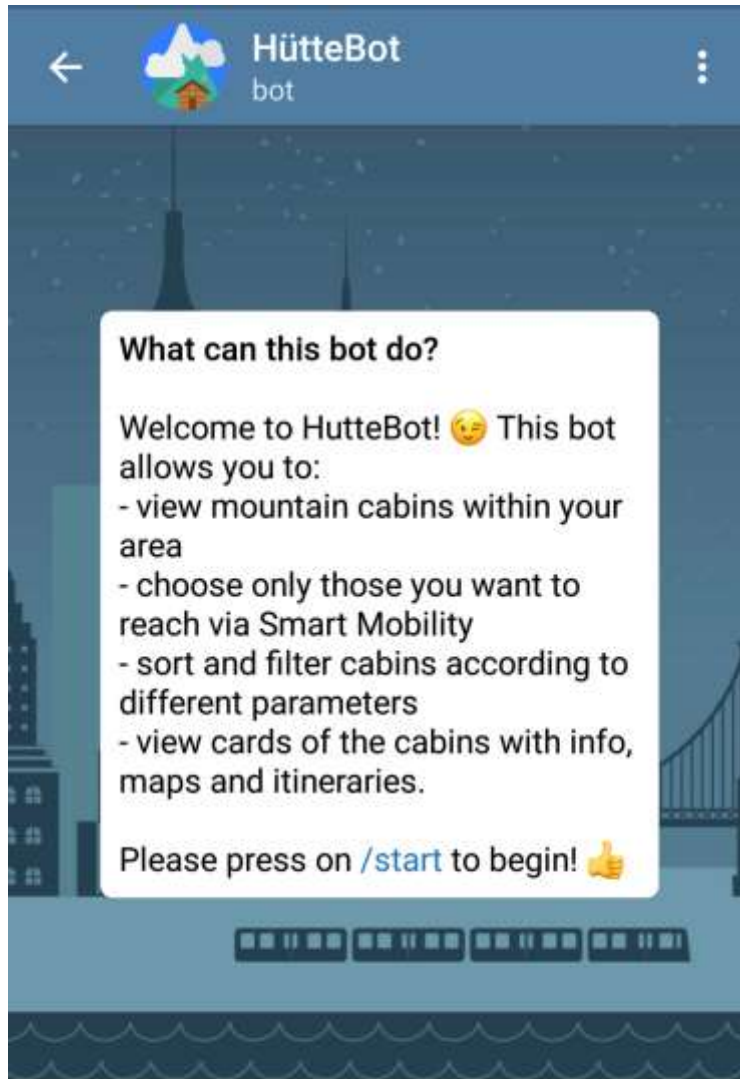
WINNER

**European Transport Innovation Challenge
2017**



Francesco BONADIMAN

***Smart, immediate & sustainable
transportation for everyone (Chatbots)***



START

- > view **cabins** around
- > reach them via **Smart Mobility + walking**
- > sort & **filter** cabins
- > view **maps, paths, info & pictures**

Innovation



Transport & tourism open

API

Better (access to) mobility

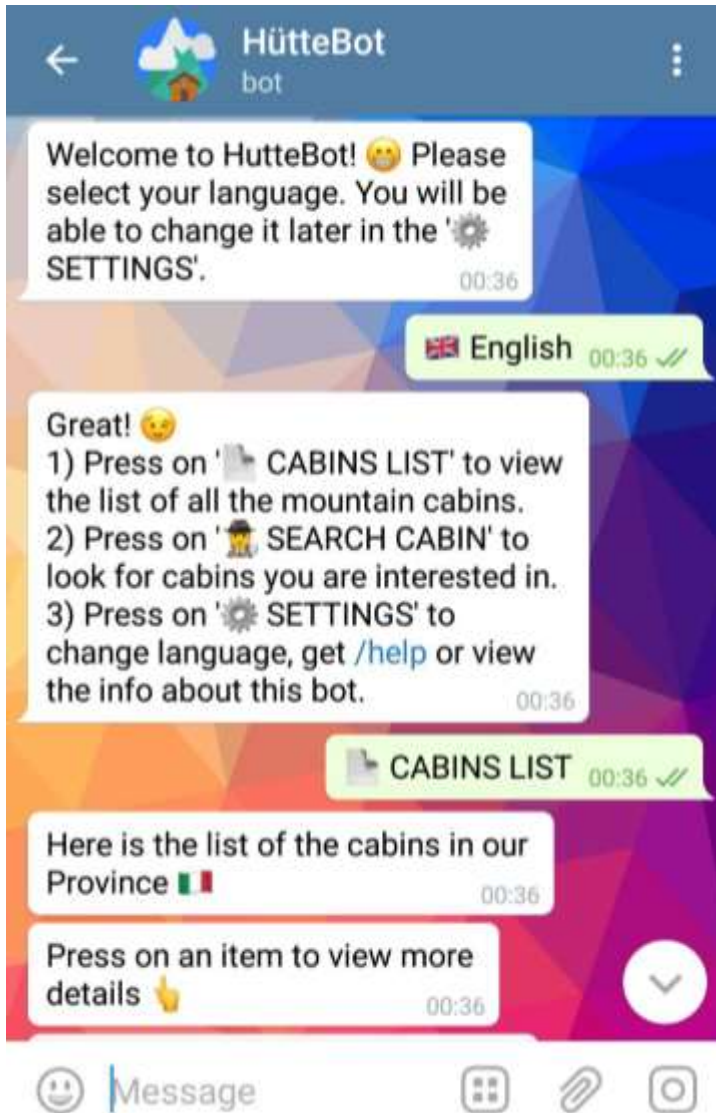
→ **less** congestion & pollution

No cognitive load → just text

Any platform, at any time

Low development costs

Chatbots



> minimal & clean **UI**

> emojis for kids,
impaired or illiterate
people

> like **chatting** with friend

> Telegram



Progress



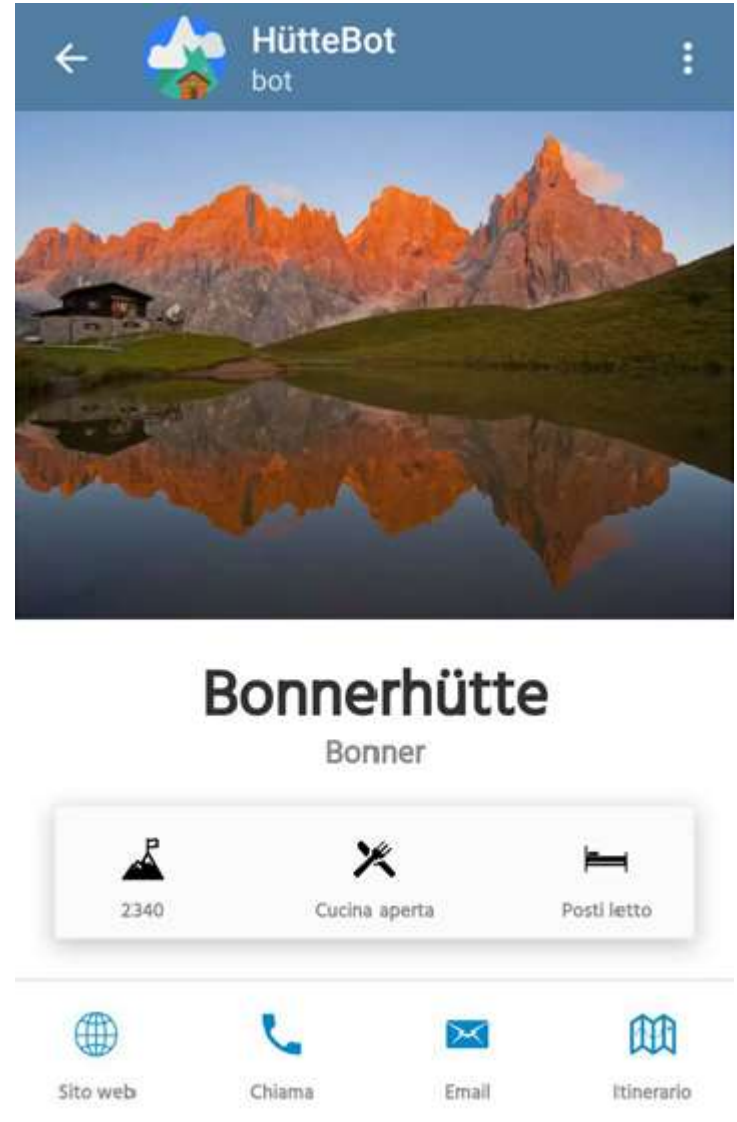
- > won Hackathon.BZ
- > Trento **PA** (WeLive)
- > integrate **real-time** weather & webcams
- > integrate **mountain-rescue** APIs



In 1 year...

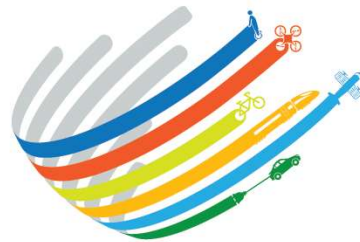


- > focus on **public transport**
- > times, stops & connections
- > **support** & promotion by EC
- > talk to PAs & **partners**
- > launch **startup** with team





WINNER
European Transport Innovation Challenge
2017



Markus BERGMANN

Carla Cargo
heavy load bicycle trailer



overrun
brake



electric
engine



Heavy load high volume bicycle trailer with overrun
brake and electrical motor assistance.

Markus Bergmann | 07644 92 93 470 | www.carlacargo.de

CARLA CARGO



Innovation



- 3 wheels, overrun brake, pedelec, 150kg
- highly scalable product
- easy and functional technology
- trailers can double transport volume on existing solutions
- high benefit to use it as hand cart on the last meters
-
- transport volume brings real alternative to car
- incredible efficient



CARLA CARGO



Implementation



- worldwide requests
- already over 40 customers
- growing demand
- we know our challenge in R&D
- need support for scaling the product

CARLA CARGO



European Transport Innovation
Challenge 2017

Creating Mobility Solutions



highly motivated team of engineers

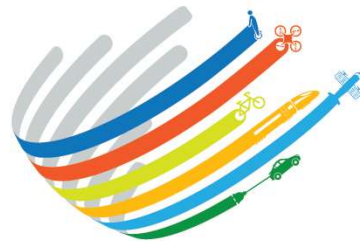


800m² workshop in black forest



WINNER

**European Transport Innovation Challenge
2017**



Sabin DIMIAN

Craft Bicycle



Craft Bicycle

Not just a #bike. A #lifestyle. Meet us at #eutransportinnovator and ride your chance to convince yourself.

Sabin Dimian
Co-Founder
362 Str. Din Jos Banesti, Romania
hello@craftbicycle.com
www.craftbicycle.com
+40 749098002





- What is different about this project?

We build sustainable city bikes made out of bamboo by using environment friendly systems to manufacture greener alternative ways of transportation.

- How does it help to solve transport problems and to reduce emissions?

Our solution is to craft a bicycle that incorporates more than 60% sustainable materials such as bamboo, hemp, resin avoiding the chemical processing.



Implementation



- *What phase is the project currently in?*

We are currently finishing the final prototypes and implementing our new technique of manufacturing to mass-produce bikes

- *Where do you still need help?*

We need an experienced investor to help us scale this business and funds to build a small facility

- *Who or what is your main target audience?*

Our bikes are developed for everyone who loves cycling for pleasure or to commute, individuals that care about their health and the environment.



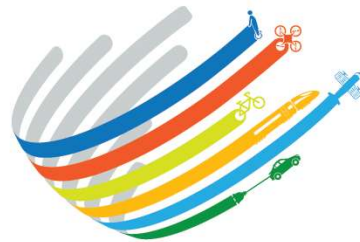
In 1 year, I would like to....

*Build the most sustainable bicycle in Europe that can be mass-produced, simultaneously providing a better way of transportation and preserving the **environment.***



WINNER

**European Transport Innovation Challenge
2017**



Riccardo SCARINCI

Accelerated Moving Walkways

Accelerating Moving Walkways: the Future of Transport in a Post-Car World

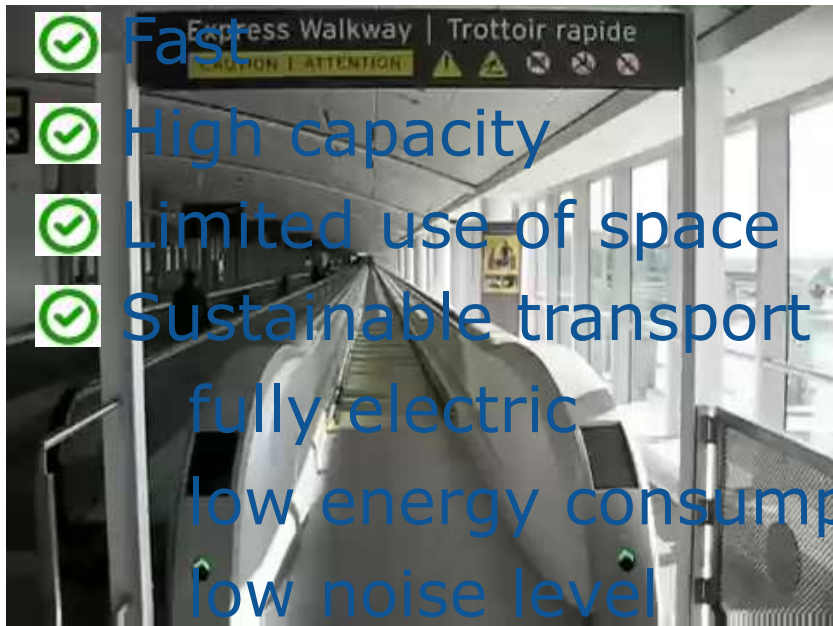
“Fast moving walkways can move 7,000 people per hour. This is a futuristic transport solution for car-free urban centers #eutransportinnovator”

twitter 

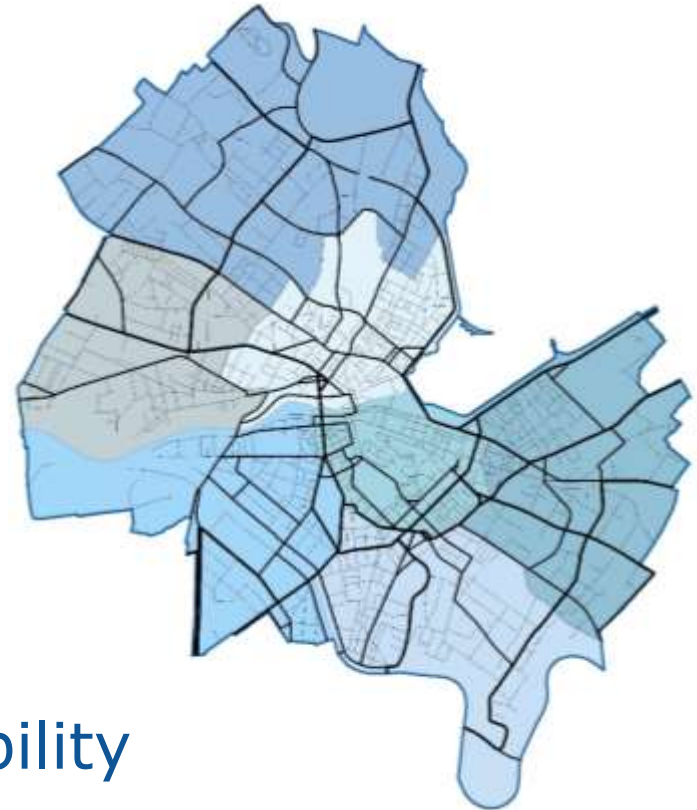
Riccardo Scarinci,
École Polytechnique Fédérale
de Lausanne, Switzerland
riccardo.scarinci@epfl.ch



A network of Accelerating Moving Walkways



ThyssenKrupp
Catalyst for sustainable mobility



Implementation



What we have

Decision support tool

- 8 publications, 2 awards
- Media coverage in 6 nations
- Interest of Geneva, Dubai

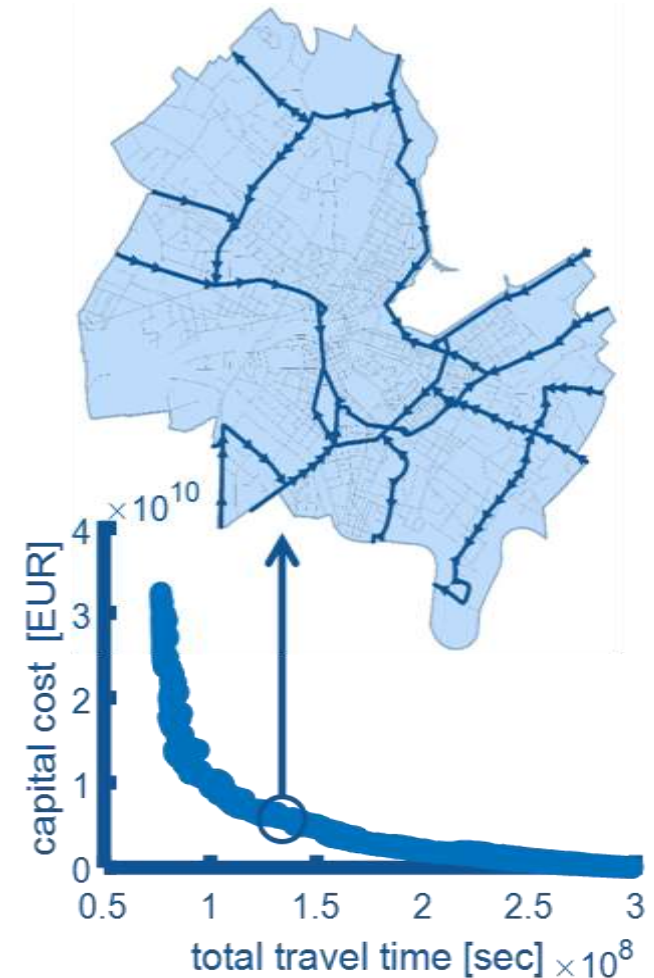
What we need

From science to practice

- Producers of MWs
- Political support

Who we look for

Innovative, dynamic,
green **Municipalities**



In 1 year, ...

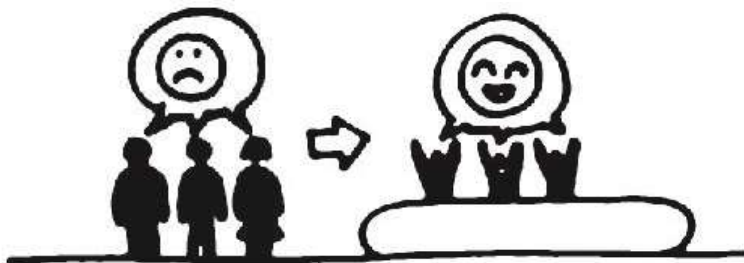


Have constituted a **consortium** with **political stakeholders, producers** and **municipalities**

Performing feasibility studies in
Berlin, Geneva, Paris, Beijing, New York...

Be a player in shaping future mobility - paradigm shift

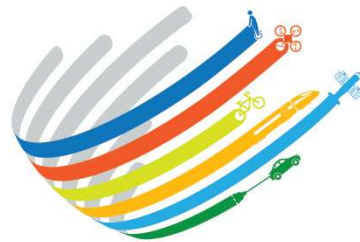
driver-less vehicles





WINNER

**European Transport Innovation Challenge
2017**



Julian NORDT

CleanSquare Robotics

Technology platform for autonomous street cleaning



Project name: Autonomous service vehicles

Contact information:

**Julian Nordt
CleanSquare Robotics GmbH
julian@cleansquare.de**

www.cleansquare.de



CleanSquare builds the platform for **automated and self driving service vehicles.**



Autonomous street sweeping enables:

- Better path planning
- Effective vehicle navigation
- Reduces GHG emissions, accidents improved cleaning quality



European Transport Innovation
Challenge 2017

Creating Mobility Solutions

Implementation



- Working on first industrial sweeper
- Autumn we start with a compact municipal sweeper
- Outreach to manufacturers and municipal service providers



European Transport Innovation
Challenge 2017

Creating Mobility Solutions



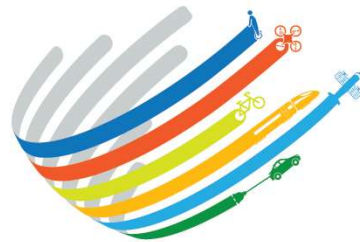
In 1 year, I would like to....

Establish the first **real world applications** for **autonomous street sweeping.**

Thank you!



WINNER
European Transport Innovation Challenge
2017



Nicolas PELLIER

Vivanoda

European multimodal travel search engine

Vivanoda

European multimodal travel search engine

Nicolas PELLIER

Vivanoda SAS

122 rue Nationale

75013 PARIS - France

nicolas.pellier@vivanoda.fr

+33 (0)6.88.76.95.65





What is different about this project?

- Millions of travels everyday in Europe
 - "How to go to Bonn from Niort?"*
 - "What train companies operate between Alicante and Marseille?"*
 - "Where to book a ticket online?"*
- Unique platform to compare and combine **air, rail, bus, ferries** and **carsharing** all in one search between two cities.



How does it help to solve transport problems and to reduce emissions?

- Gives European travellers a better and easier access to interconnected transport information
- Encourages travellers to take public transport rather than their private car



European Transport Innovation
Challenge 2017

Creating Mobility Solutions

Implementation



What phase is the project currently in?

- Live since 2013 and drove **2 millions users in 2016** mainly from France, Portugal and the UK
- Mostly **self-financed**

bpifrance » in early 2017: grant from French Public Investment Bank for Innovation (technical developments) 23K€

Where do you still need help?

- **Coaching** and **mentoring**
- **Finance** and **growth**

Who or what is your main target audience?

- **European travellers** looking for transport solutions
- **Transport operators**



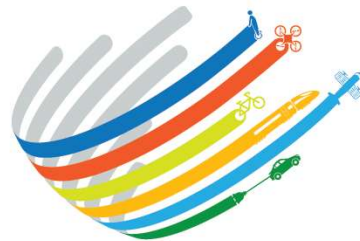
In 1 year, I would like to...

- **Enlarge coverage** in Europe
- Reach **more European markets** (DE,ES,NL,BE,PL,CZ,...) and **boost audience**
- Add **new features** (e.g. carbon footprint sorting,...)



WINNER

**European Transport Innovation Challenge
2017**



Christoffer HAMIN

Digital reliable railway

D-RAIL

#Digital reliable railway. Daily monitoring from ordinary trains enables predictive maintenance. Safe and dependable choice of transport.

Christoffer Hamin
D-RAIL
www.d-rail.se





30 000 Trains



European Transport Innovation
Challenge 2017



Innovation



European
Commission



European Transport Innovation
Challenge 2017

Creating Mobility Solutions



In 1 year...

- **Pilot project completed**
- **Helping 3 larger customers**
- **Accidents avoided**
- **Railway is digital and dependable**



European Transport Innovation
Challenge 2017

Creating Mobility Solutions



WINNER

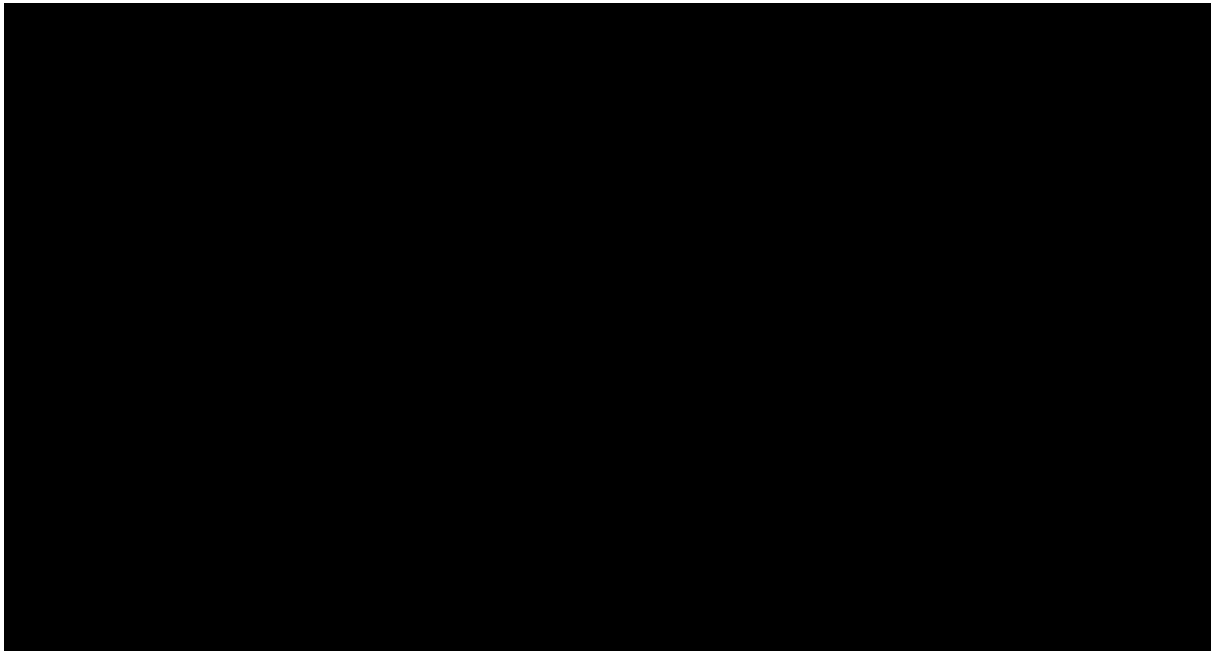
**European Transport Innovation Challenge
2017**



Geert DE LEEUW

CycleSpex

Cycle and Spatial Context Experience Simulator (VR)



Tweet

The key to smart & healthy cities lies in engaging mobility. #CycleSpex (VR) reveals aspects making cycling more engaging! #eutransportinnovator

Geert de Leeuw

Lecturer Built Environment & Co-founder CycleSpex

leeuw.g@nhtv.nl

+31646405097



Innovation



every smile caused by cycling is worthwhile
enhancing the shift to cycling to reduce negative impacts of car traffic



Target audience



- involve end-users & stakeholders
- evaluate design solutions
- bridge the gap between science, policy and planning



- innovative experimental design
- valuable data on cycling experience, human behaviour and network performance

Key features



cyclespex in one year...

- contribute to cycling safety awareness and practice/training with complex situations
(looking for partners with shared ambition)
- applied by cities as evaluation tool for design with active involvement of (potential) cyclists
(call to cities)
- Hardware upgrades to improve simulation of the act of cycling and including biometrics
(looking for partners)
- extended 3D-model library designed for Virtual Reality to improve applicability of the tool
(funding needed)



realistic environments



in-game questioning

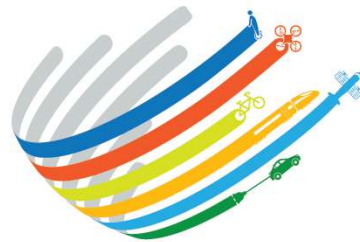


easy scenario construction



WINNER

**European Transport Innovation Challenge
2017**



Wei LIU

***Unlock the sharing economy
for the parking sector***



Project name: Unlock The Sharing Economy for the Parking Sector

Tweet: Parking sharing: parking lot owners can share parking to earn additional money, and parking users can find cheap and vacant parking spaces more easily.

Wei Liu, Haitao He/ University of Glasgow/
Contact: +44(0)1413301839 or
Wei.Liu@glasgow.ac.uk



- *What is different about this project?*

- **Systematic framework** for analyzing and optimizing efficiency of an online platform for parking sharing (match demand and supply);
- **Integration** of parking sharing platform into **connected and autonomous** transportation systems in smart cities;
- Parking **users** (demand), parking **sharers** (supply) and parking **operators** can all gain additional benefit.

- *How does it help to solve transport problems and to reduce emissions?*

- **Boost supply** of available parking without adding to the demand of building more parking lots;
- Travelers can **save time** as they have a guaranteed reserved parking slot (through the sharing platform) and have **less cruising** for parking;
- Less travel from each individual lead to **less congestion**, less vehicle kilometer travelled thus **less fuel consumption** and **less emission**.



European Transport Innovation
Challenge 2017

Creating Mobility Solutions



- *What phase is the project currently in?*

- Currently model and analyze behaviors (of parking sharers, parking users and parking operators) under the parking sharing platform;
- simulate the performance of such a platform, especially when it is integrated into a connected and autonomous transport environment;
- Our mathematical modeling and simulation tests suggest that the operation of the parking sharing platform should be well designed thus parking sharers and parking users can be well motivated to use the platform.

- *Where do you still need help?*

- Industrial partners and joint funding opportunities to support this initiative

- *Who or what is your main target audience?*

- Academic and Industrial Partners/Co-developers
- City Councils and Local Communities willing to participate



In 1 year, I would like to

integrate the developed sharing platform into a connected and autonomous transport environment and evaluate its performance;

conduct surveys and interviews to explore the acceptance of such a platform among the population,

start to implement the developed sharing platform into local communities, and evaluate the usability, penetration, performance.



WINNER
European Transport Innovation Challenge
2017



Joanna VAN DER VEEN

Accessibility mapping

Urban digital way-finding for people with reduced mobility

Accessibility mapping: urban digital way-finding for people with reduced mobility

A new journey-planning platform for accessible, sustainable travel. An advocacy tool to raise awareness of physical barriers & drive change

Joanna van der Veen

Email: joanna_vdv@hotmail.com

Twitter: [@joanna_vdv](https://twitter.com/joanna_vdv)





Allows users to **search specifically for end-to-end routes** navigable by people with particular barriers to their mobility

Brings the **power and utility** of an extremely common kind of tool to a new audience

An **add-on to existing tools**

Highlights good **walking or public transport options**, reducing reliance on use of private vehicles

Makes **advocacy** on accessibility issues easier



Implementation



Current status: Initial concept and research phase

Looking for:

Existing research on the topic

A pilot location

Developers & technology experts

Potential partners

Target audience: people with mobility issues and amenable local authorities



In 1 year, I would like to....

Be actively working on a refined version of this project, alongside an industry partner



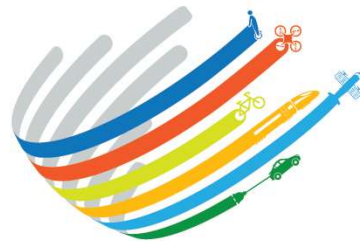
Interested? Please get in touch!

Thank you



WINNER

**European Transport Innovation Challenge
2017**



Liard KRANEN

UPsET!

Last mile deliveries go underground



European
Commission

UPsET



UPsET! Last mile deliveries go underground

Liard Kranen

[linkedin.com/in/liardkranen/](https://www.linkedin.com/in/liardkranen/) &
liard.kranen@gmail.com





EU greenhouse gas emissions from transport increase for the second year in a row



June - 2017

Time to let transport actively contribute to cities' efforts to become more sustainable and liveable?

What is different? **UPsET** is a system of **underground pipelines** to handle deliveries in urban areas

- no drones no Hyperloop: budget friendly system with **80cm Ø** pipelines
- the space underneath 1 side of a cycling track, regenerate existing bicycle infrastructure
- central parcel output and input locker stations are accessible with a digital key

How does it help? **UPsET** is the **metamorphose** from 'for cars' towards a **better quality of life**

- eliminates tons of carbon emissions, noise pollution & congestion
- brings significant economic (**time, costs**) and environmental & health benefits (**air quality & frustration**) with the effort of a slight behavioural change
- solution to handle E-Commerce boom urban environment effects of the many (**inefficient-**) parcel delivery/commercial vehicles for private customers



European Transport Innovation
Challenge 2017

Creating Mobility Solutions

Implementation



Status? **UP_sET** is open for **cooperation** & up for **evaluation**: turning ideas into **action**!

Help? to let **UP_sET** solve transport problems & to reduce emissions we need:

- **partners** (private (daring to take radical steps) & public (research funding))
- **media expertise** (disruptive ideas such as **UP_sET** need campaigning/lobbying)
- **research** (more 'substance' e.g. back-casting, future scenario's, impact calculations..)
- **collaboration** (public <> private, focussing in a interdisciplinary project)
- **network** (a wide variety of ambassadors to circulate the idea to a wider public!)
- **governance** (on which policy level to start?)

and a **upset** (quality of life, air quality, congestion, limited public space) and

passionate (intrinsic motivation to go beyond the **Paris accord**)

mayor to embrace the **UP_sET** idea in his or her city!



European Transport Innovation
Challenge 2017

Creating Mobility Solutions

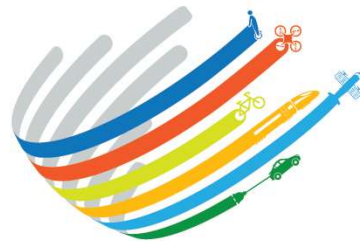


Let's thrive with UP_sET! Last mile deliveries go underground now #eutransportinnovator
[linkedin.com/in/liardkranen/](https://www.linkedin.com/in/liardkranen/) & liard.kranen@gmail.com



WINNER

**European Transport Innovation Challenge
2017**



Tibor PETROV

***Emergency Vehicles Coordination
Using V2X Communication***



Project name: Emergency Vehicles Coordination Using V2X Communication

Tweet:

#eutransportinnovator:EmergencyCoordination

**Tibor Petrov, University of Žilina, Slovakia
tibor.petrov@fel.uniza.sk**





- What is different about this project?

- first fully integrated system design to use intervehicular communication for an emergency services support*
- combines data from multiple sources to support emergency vehicles' safe transit planning*

- How does it help to solve transport problems and to reduce emissions?

- helps to increase road safety by avoiding collisions*
- helps to achieve shorter driving time of emergency vehicles*
- helps to avoid traffic congestions*

Animation by:
Ing. Ján Hlubík, PhD. – University of Žilina
jan.hlubik@fel.uniza.sk





- What phase is the project currently in?

- project is currently in the phase of a computer simulation modelling

- Where do you still need help?

- I need guidance regarding some legislative-related and practical topics

- I need to obtain real traffic data

- Who or what is your main target audience?

- standardization organizations

- vehicle manufacturers

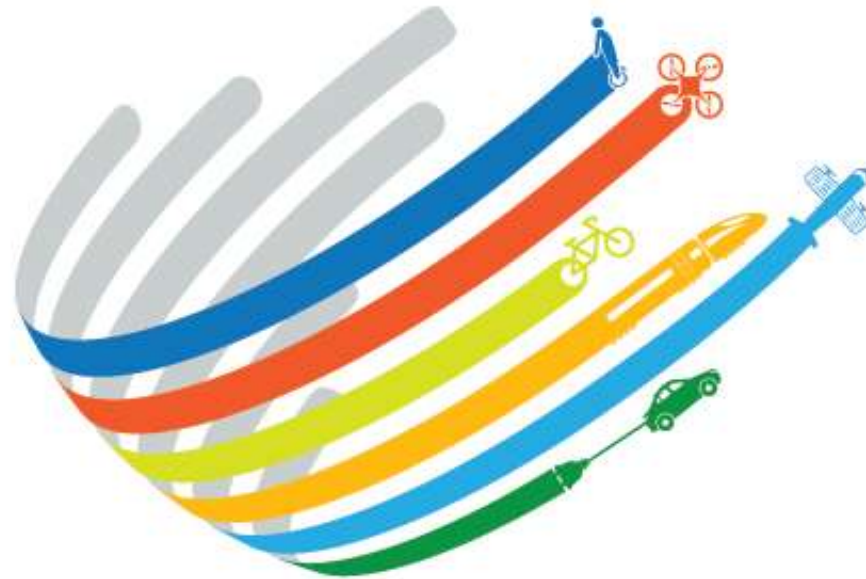
- network service providers

- road operators, emergency services operators

In 1 year, I would like to....

- build a fully operational computer model with real-life traffic data of a selected urban area with eCall integration**
- have a practical feasibility study of such a network completed with a set of recommendations for:**
 - vehicular application developers**
 - emergency services providers**
 - roadside communication infrastructure network designers and operators**
 - standardization organizations**

European Transport Innovation Challenge 2017



[#eutransportinnovator](#)

ec.europa.eu/transport/themes/research/challenge_en