



# FLEET OPTIMIZATION PLATFORM FOR AUTONOMOUS VEHICLES

Urban Mobility India 2016

November 11th 2016

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NYC  
**1900**



NYC  
**1913**

EVERY  
WHERE  
**TODAY**



EVERY  
WHERE  
**TODAY**

**ALREADY A REALITY:  
AUTONOMOUS BUSES**



**IT'S COMING REALLY SOON:  
AUTONOMOUS CARS**



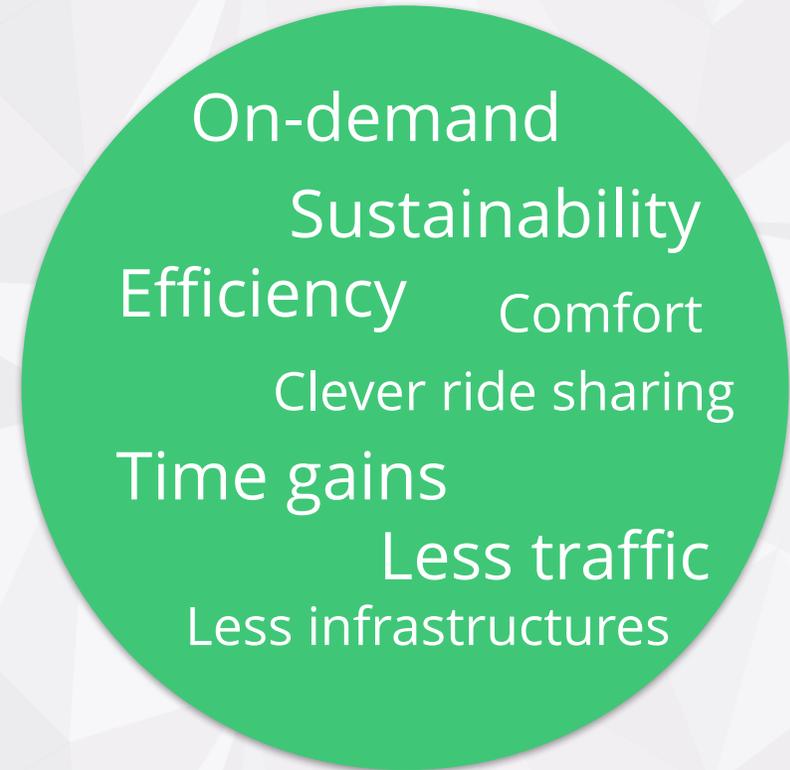
# Autonomous mobility promises



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**Provided by the  
autonomous vehicle**

Thanks to its numerous sensors, it won't have an accident. And you can work while being driven.



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**Who brings that?**

As vehicles are not able to organize themselves.

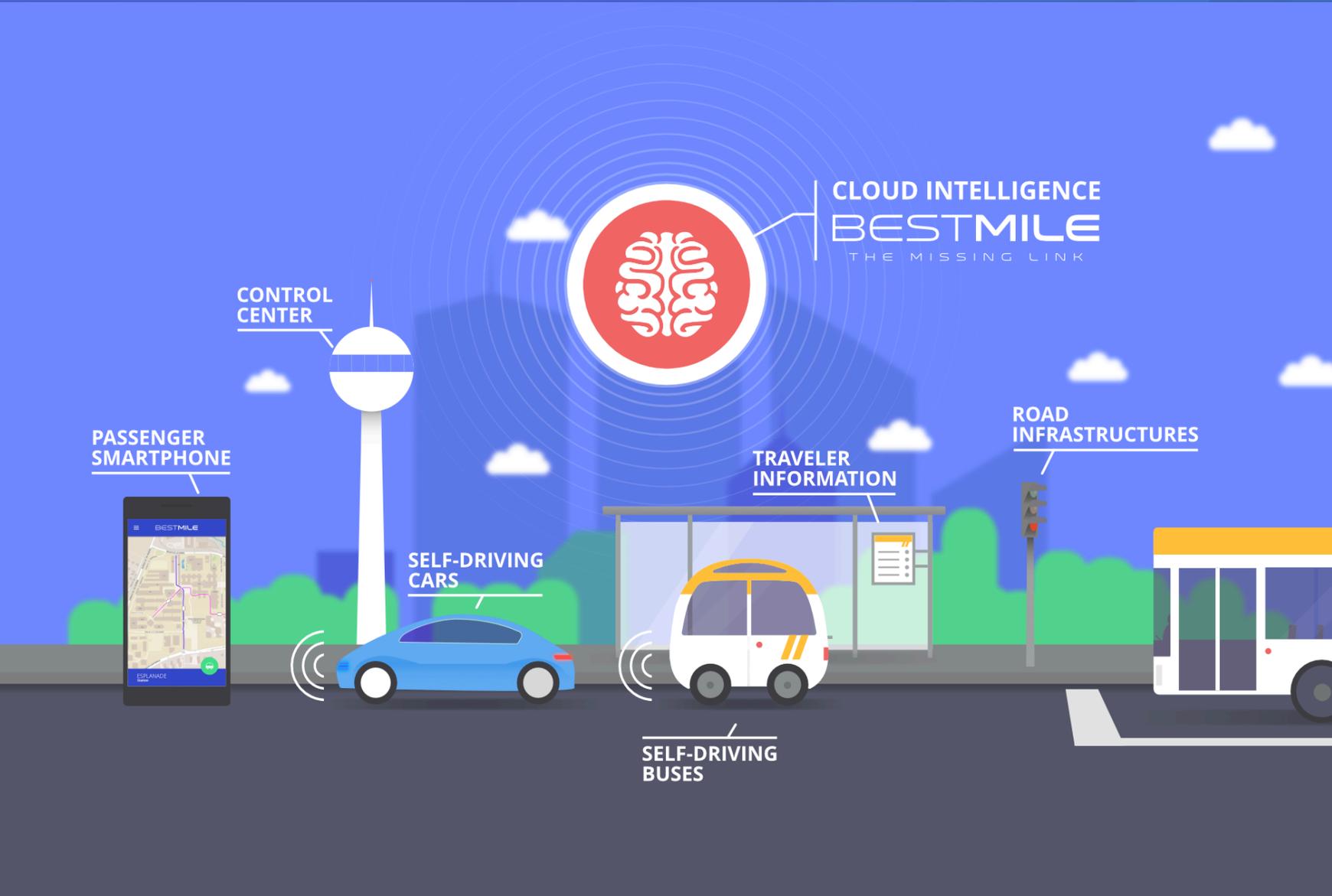
# BESTMILE CLOUD PLATFORM

*The B2B solution for autonomous mobility*



**BESTMILE**

CONFIDENTIAL - 11/7/16



**The future of mobility isn't in autonomous vehicles, but in what they can offer once they are operated and managed together.**

# BESTMILE PRODUCT

A unique B2B2C solution for autonomous fleets



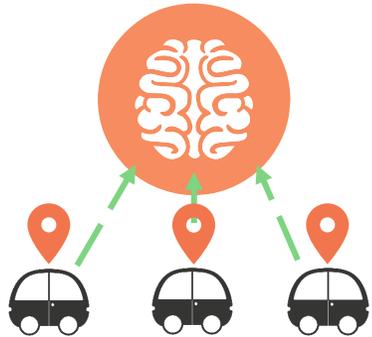
BESTMILE

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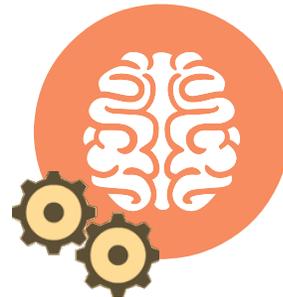


**1. Get real-time demand and / or schedule to follow**

**2. VEHICLES SEND DATA TO THE PLATFORM**



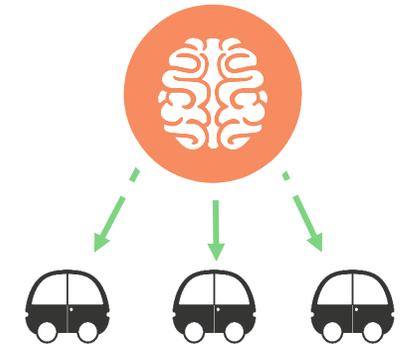
**3. OPTIMIZE THE SYSTEM**



**4. TRANSLATE TO MISSIONS**



**5. SEND MISSIONS**



**6. Provide relevant information to passengers, in real-time**

# BESTMILE ENGINE

*Innovative technology*

Real-time dispatching

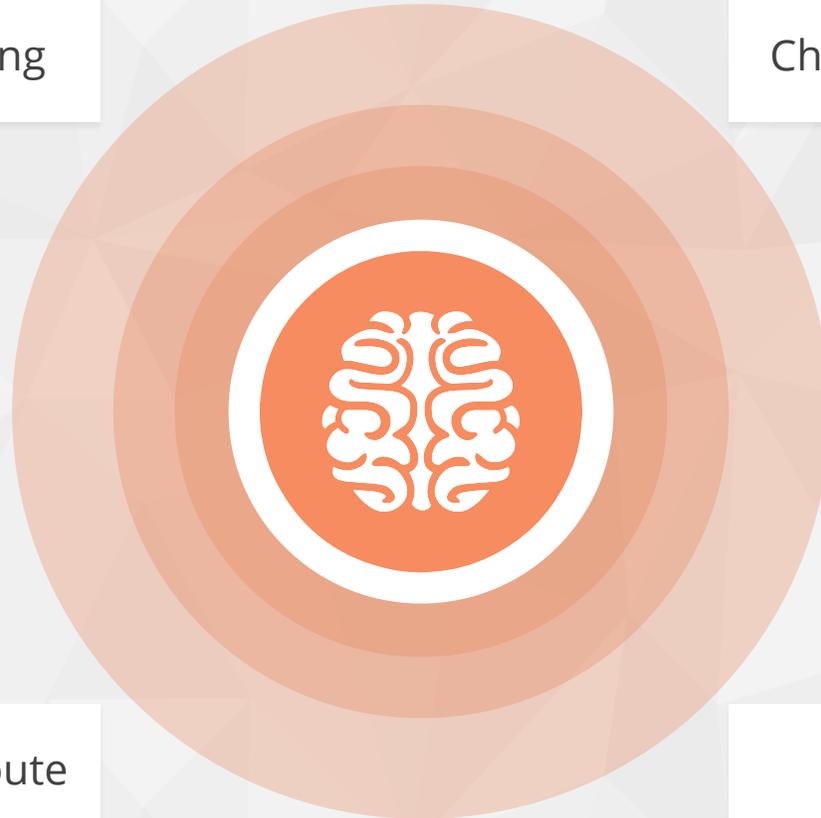
Charging management

Optimized HD routing

Network state forecast

Flexible timetable/route

Data analytics



**THE MORE THE SYSTEM IS USED, THE SMARTER IT GETS**

# OUR TALENTED TEAM

25 people (17 FTE) from 10 countries



BESTMILE

CONFIDENTIAL - 11/7/16



**Raphaël Gindrat**  
Chief Executive Officer  
Co-founder



**Anne Koymans**  
Chief Science Officer  
Co-founder

 + HR, Exec. Assistant & Interns



## R&D TEAM

Front-end engineers  
Back-end engineers  
DevOps engineers

**Aloïs Cochard**  
CTO



**Nikolas Geroliminis**  
EPFL Professor



+ 2 mathematicians



**Luc Texier**  
Head of Business Dev.



**Michaël Thémans**  
Strategic Business Dev.



**Leemor Chandally**  
Strategic Partnerships,  
North America



**Mikaël Vaivre**  
Product Manager

# R&D PARTNERSHIP

BACKED BY ONE OF THE WORLD'S TOP UNIVERSITIES



2 year CTI project  
1 million CHF (500'000 CHF from state)  
3 EPFL research scientists involved



## PROF. NIKOLAS GEROLIMINIS

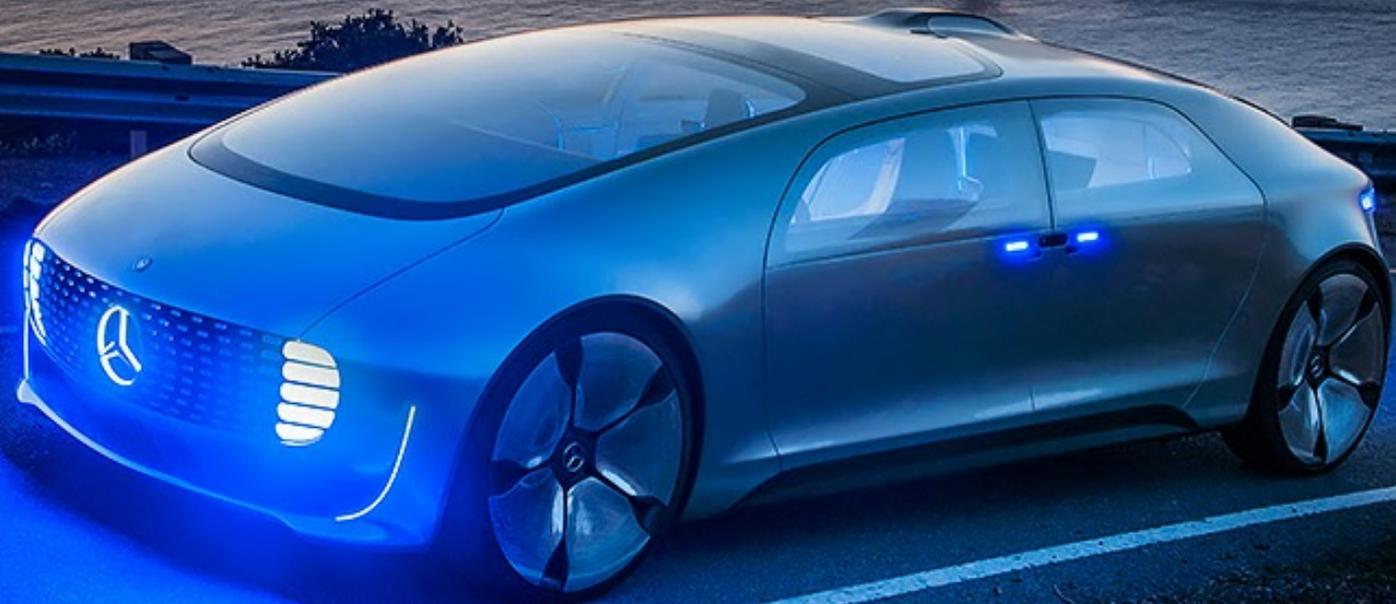
- MSc and Ph.D. in civil engineering, University of California
- Transportation Research Board's Traffic Flow Theory Committee
- "Transportation Student of the Year"
- "Outstanding Graduate Student Instructor Award"

-  Network-based planning algorithm
-  Dynamic routing
-  On-demand optimization
-  Level of-demand
-  Disruption management

## RESULTS

-  Complex algorithms for **large scale fleets**
-  Exclusive **license for BestMile**
-  **Patentable outcomes**

# AIMING FOR **AUTONOMOUS CARS**





# AUTONOMOUS CARS



**Extended valet parking**

**Clever car sharing**

**Taxi services**

# AUTONOMOUS BUSES



Public transportation  
**For private sites  
and cities**



SUMMER  
2015

# CityMobil2 - Switzerland

European project

**100%**

FULL AVAILABILITY

**3315**

10'000 HOURS  
KILOMETERS

**6881**

PASSENGERS

**6** VEHICLES

**6** MONTHS

**ON DEMAND**

WITH SMARTPHONE APP



2016 -

...

# Civaux nuclear power plant

**PRIVATE SITE**

Service for employees

**6 NAVYA  
Arma**

**INDEFINITE  
TERM**

Start with a 5 years contract

**NIGHT  
OPERATIONS**



2016 -  
2017

City Center – Opened on June 23!

**POSTBUS**

SWITZERLAND'S MAIN  
PUBLIC TRANSPORT  
OPERATOR

**2 NAVYA  
Arma**

NEW VEHICLE

**2 YEARS**

OPEN TO EVERYONE  
IN SION, SWITZERLAND

**IN TRAFFIC**

PUBLIC SITE

# AUTONOMOUS BUSES

The goal: to partner with every player in the market

## CONFIRMED PARTNERSHIPS



navya



LM LOCAL MOTORS



Auro Robotics



THE HI-TECHROBOTICSYSTEMZ LTD.  
EVOLUTION THROUGH INNOVATION



next future transportation inc.

## TECHNICAL COMPATIBILITY



EASY  
MILE

## OTHER PLAYERS COMING...



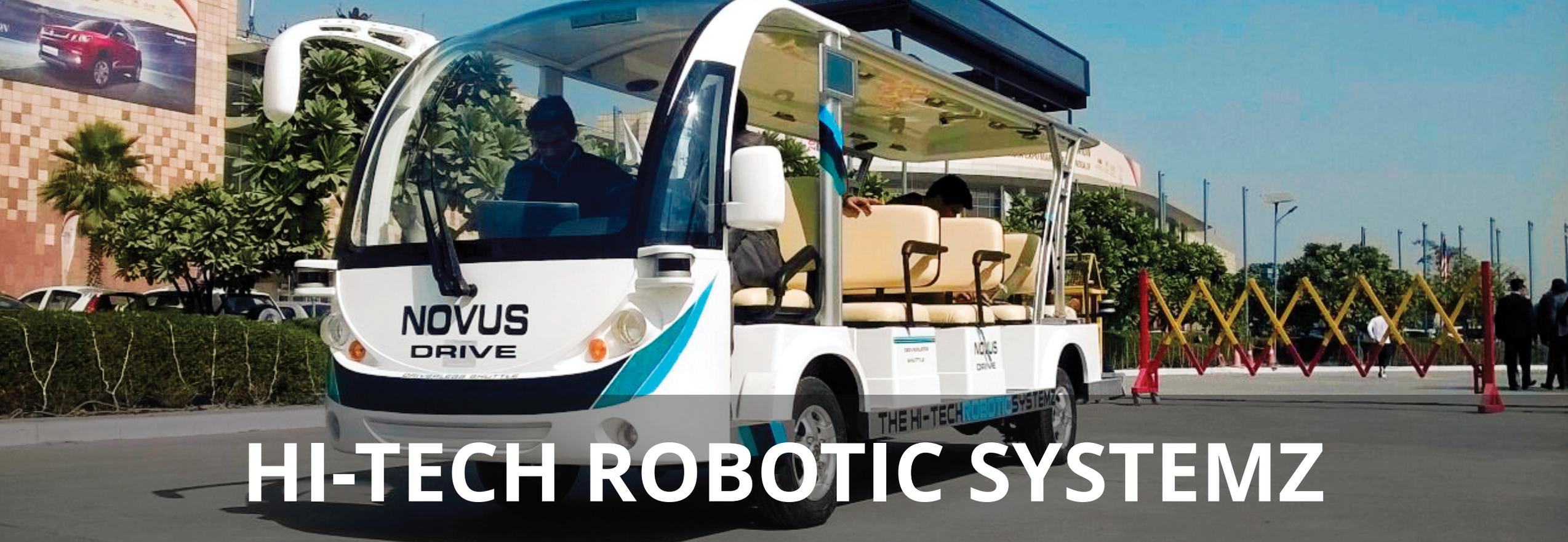
YAHOO!  
JAPAN

Robot Taxi

# PARTNERS AND CONTACTS

All over the world





# HI-TECH ROBOTIC SYSTEMZ

**Pioneer company in  
unmanned systems  
development**

**Strategic  
Partnership**

**First AV  
Application in  
India**

**IN 10 YEARS, AUTONOMOUS MOBILITY WILL BE  
A HUNDREDS BILLION \$ INDUSTRY**

**50%**  
OF IT  
**WILL BE COVERED  
BY NEW PLAYERS**

**AND IT'S STARTING NOW**  
**THANK YOU.**

**Mashable**

Daily **Mail**.com

**WIRED**

**The INDEPENDENT**

**BUSINESS  
INSIDER**

**c|net**

**FOX  
NEWS**

**unwire.hk**  
玩生活·樂科技