

Self-driving Velomobile

Switches between People, Packages and Surveillance

A velomobile is a three or four-wheeled “bicycle” with a body. It provides **comfort**, **weather-protection** and a **safe** ride in all weathers and has a very low environmental impact. You don't need a driver's license or be able to balance a bicycle, so it is **very inclusive**.

A self-driving velomobile may sound silly and unnecessary, but the self-driving technology is not intended to be used when you are riding it, but when it is empty. It will be used for autonomous parking, vehicle delivery, package delivery and surveillance.

This flexibility enables a **very high utilization level** and is a great advantage both environmentally and economically.



The parking problem

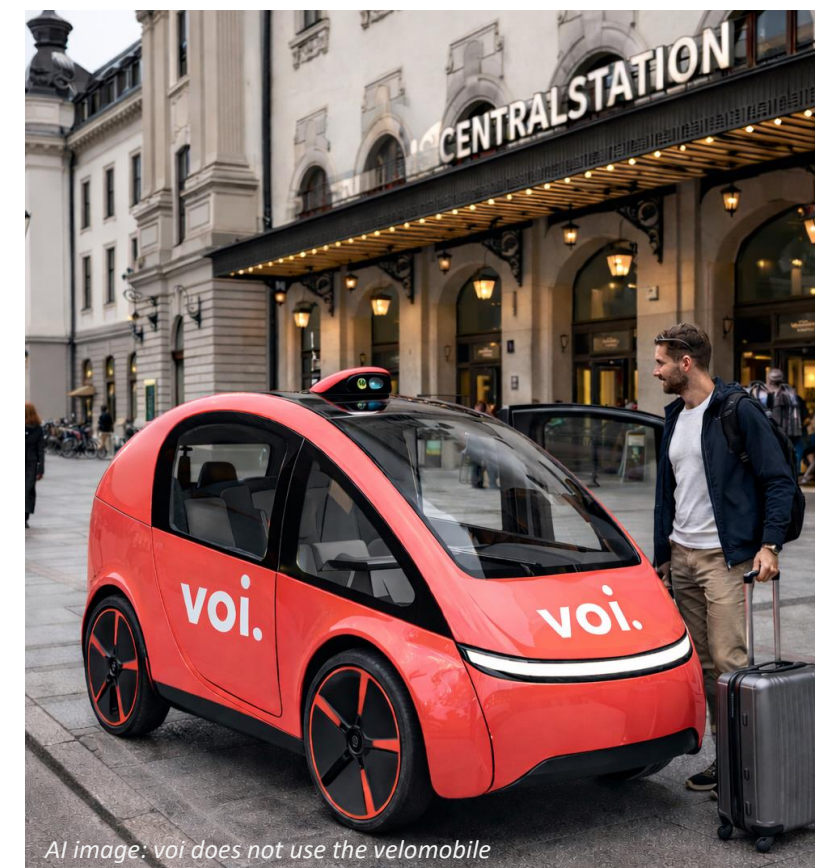
Automatic vehicle delivery and parking is convenient but also intended to make it easier to find parking solutions in dense city centers and residential areas. You can have the parking a good distance away but still come to your door.

It is also well suited for rental, just order it to your door like a mini robot taxi. And when you arrive, it parks itself autonomously in a suitable place or returns to a charging station.

The last mile of public transport

The velomobile picks you up at the door and you pedal to the train station, where you simply get off and let it go on other errands.

When the train arrives, another velomobile is ready to take you the last leg. This should make public transport more attractive and accessible to more people and reduce the need for private cars. By making it easier to switch to public transport, the velomobile contributes to fewer private cars on the roads and a cleaner and safer urban environment.



AI image: voi does not use the velomobile



Autonomous package delivery

The velomobile is designed to quickly switch between passenger and cargo modes. The backrest folds down and a partition wall slides forward to create a large flat cargo space.

When it arrives at the customer a notification is sent via an app informing them that the package is available for collection outside. The velomobile remains securely locked until the customer unlocks it with their app. This ensures safe and traceable delivery.



A rolling surveillance device

The self-driving technology with advanced sensors and cameras also makes it an excellent mobile surveillance system. Use it as a service vehicle during the day and letting it drive around and monitor a factory area at night. The small format makes it possible to navigate on walking and bicycle infrastructure, courtyards and factory areas.

The technology also functions as a very advanced anti-theft system for the vehicle itself.

The road to autonomous driving

During human driving, the velomobile continuously collects data about traffic situations, obstacles, road conditions and perhaps most importantly human behavior for the cycling and walking infrastructure we want to use. The collected data is then used to train and improve the self-driving system with real traffic scenarios.

With human safety drivers during development and testing, the risk of getting the public and decision-makers against us is reduced. We don't need to release any vehicles into autonomous operation before they work well and have become an accepted part of traffic.

Advantages over pure delivery robots

Unlike specialized delivery robots, our velomobile can switch between different applications and operating modes and achieve a very high utilization rate. Our hybrid solution can be introduced earlier than fully autonomous alternatives because it works well even without fully developed autonomous operation.



Existing technology – combined into a new solution

The vision we present is not based on future fantasy technology, but on the integration of already existing and proven solutions.



Starship Delivery Robots

These small, autonomous robots are already being used for last-mile deliveries, handling food and small packages with high efficiency, demonstrating the potential of unmanned transportation.



Velove Last Mile Cargo Bike

An cargo e-bike designed for efficient and sustainable deliveries in urban environments. It combines large cargo capacity with the ability to use bicycle infrastructure.



Quadvelo Velomobil

An aerodynamic and protected velomobile that offers comfort and efficiency for passenger transport. Its four-wheeled construction and canopy inspire the multifunctional design that our velomobile will have.



Summary and next steps

A genuine game changer

Self-driving technology makes active micromobility accessible and attractive to many more people. And the multifunctionality provides profitability despite expensive technology and development.

Accelerated development

Our unique ability to use human drivers enables faster development and approval than competing fully autonomous solutions.

Search for partners

We are now looking for strategic partners and investors to bring this groundbreaking solution to market. Contact us to help shape the future of sustainable mobility!

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