

# otonomo



## Otonomo Dynamic Anonymization Engine

Intelligently anonymizing car data for more apps and services

# Meet the New Privacy Protection Needs of the Connected Car

The Otonomo Dynamic Anonymization Engine protects driver data with sophisticated combinations of anonymization techniques to make anonymous automotive data usable and valuable for a diverse range of mobility applications and services.

Aggregate, anonymous data generated by connected cars is valuable for a wide range of use cases. This data offers service providers a macro-level lens on what's happening in and around the vehicle:

- A car company can detect early part failures to avoid major recalls
- Energy analysts can pinpoint where to best place EV charging stations
- Cities can reduce car-idling carbon emissions by improving traffic
- Retail stores can better match store hours to movements in their area

However, drivers' privacy concerns are one of the biggest potential barriers to developing an ecosystem of applications that utilize this data.

## Otonomo Dynamic Anonymization Engine benefits



### VEHICLE OEMS

- Offer aggregate car data to more service providers for more applications
- Generate new and recurring revenue streams
- Stay in compliance with privacy policies and regulations
- Meet drivers' expectations about data protection



### APP AND SERVICE PROVIDERS

- Gain access to appropriately anonymized data that works better for your needs
- Simplify the use of automotive data in apps and services
- Eliminate the risk of exposing automotive data that could be re-identified

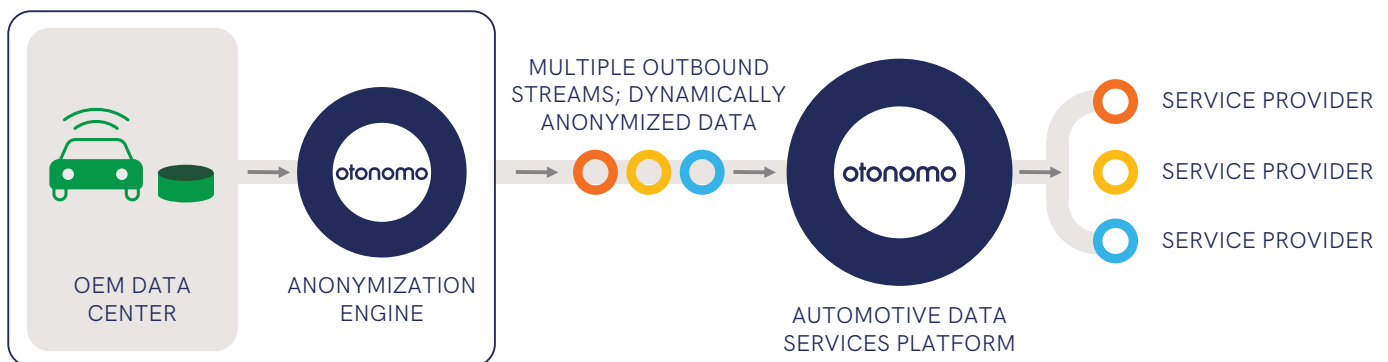
## Removing PII is not enough

A driver can be identified not only by personal information but also indirectly by the vehicle's VIN number, location, or trip patterns, such as driving daily to and from work. But "brute force" anonymization would render the data useless for many types of applications and analyses. There's a different "best way" to anonymize data for each use case.

## Maximize commercial value while safeguarding driver privacy

The Otonomo Dynamic Anonymization Engine utilizes multiple anonymization techniques to protect drivers while preserving the value of automotive data for specific use cases. For example, parking and road safety use cases require precise locations, so location blurring is not a practical way to anonymize the data. However, vehicle ID can very often be blurred and changed. Other use cases such as media measurement do not require precise locations, but do require information about how many discrete vehicles passed by a location. The Otonomo Dynamic Anonymization Engine can handle such complex scenarios, dynamically selecting the optimal anonymization techniques.

## Otonomo Dynamic Anonymization Engine



## Deliver higher-quality, richer apps and services

App and service providers gain access to valuable data that they can confidently use to deliver a wide range of apps and services, such as mapping, managing car health, planning smart city infrastructure, or conducting traffic-pattern research for retail, media, and many other use cases. By anonymizing this data in different ways for each consumer and use case, OEMs and data providers can maximize its value to different service providers.

## Meet regulatory compliance requirements

Data providers and mobility service providers want to ensure that they are fully compliant with their privacy policies and global privacy regulations such as GDPR in the European Union or the Automotive Consumer Privacy Protection Principles in the United States. With the Otonomo Dynamic Anonymization Engine, compliance gets much simpler for each geographic area where they do business.

## HOW IT WORKS





The Otonomo Dynamic Anonymization Engine can run as a managed service in the OEM or data provider’s IT environment. Data providers can ensure that no data leaves their data centers without appropriate anonymization in place.

- 1 It begins by stripping out all PII, such as driver information or VIN.
  - Blurring location frequency by increasing the intervals between location measurements
  - Aggregating vehicle data from ignition on/off into a single trip record, obscuring revealing information such as distance, speed, or time
- 2 It then intelligently selects and applies one or more additional anonymization techniques to blur location, time, or trip data, while maintaining the required parameters for the data’s intended use:
  - Blurring VIN with an arbitrary vehicle ID
  - Blurring location accuracy by truncating digits from vehicle GPS coordinates
- 3 The Otonomo Dynamic Anonymization Engine can fine-tune its output based on OEM/data provider or data consumer requirements, local regulations, and any other applicable privacy policies.

## Per Use Case Dynamic Anonymization

### PARKING APPS

Accurate location is critical  
Driver’s ID is not used

-  Reducing Location Accuracy by truncating LAT / LON digits
-  Blurring Location Frequency by spacing out location data points
-  Cropping Trip Data by truncating start / end points
-  Replacing VIN With Vehicle ID by frequent random ID changes

### MEDIA RESEARCH

Location doesn’t need to be accurate  
Continuous driver ID is important (at least per trip)



## ABOUT OTONOMO

The Otonomo Automotive Data Services Platform fuels a network of 15 OEMs and more than 100 service providers. Our neutral platform securely ingests more than 2 billion data points per day from over 18 million global connected vehicles, then reshapes and enriches it, to accelerate time to market for new services that delight drivers. Privacy by design is at the core of our platform, which enables GDPR and other privacy-regulation-compliant solutions using both personal and aggregate data. Use cases include emergency services, mapping, EV management, subscription-based fueling, parking, predictive maintenance, usage-based insurance, media measurement, in-vehicle package delivery, and dozens of smart city services. With an R&D center in, Israel, and a presence in the United States, Europe, and Japan, Otonomo's investors include Bessemer Venture Partners, Aptiv, Dell Capital, Hearst Ventures, StageOne Ventures, and Maniv Mobility.

### Evolve your product portfolio today

Contact Otonomo to explore our dynamic anonymization engine and learn more about how our solutions can help you innovate and scale.