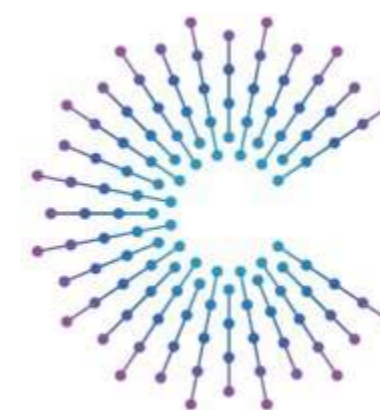


Enabling the global services marketplace with a  
single location-based API

**ALL MEMBER MEETING**

**APRIL 26-28, 2022**



**COVESA**

Accelerating the future of connected vehicles

# LBS for Vehicles is not new but...

- Low user awareness
- Complex user journey
- Wish to replace user routine rather than facilitate it

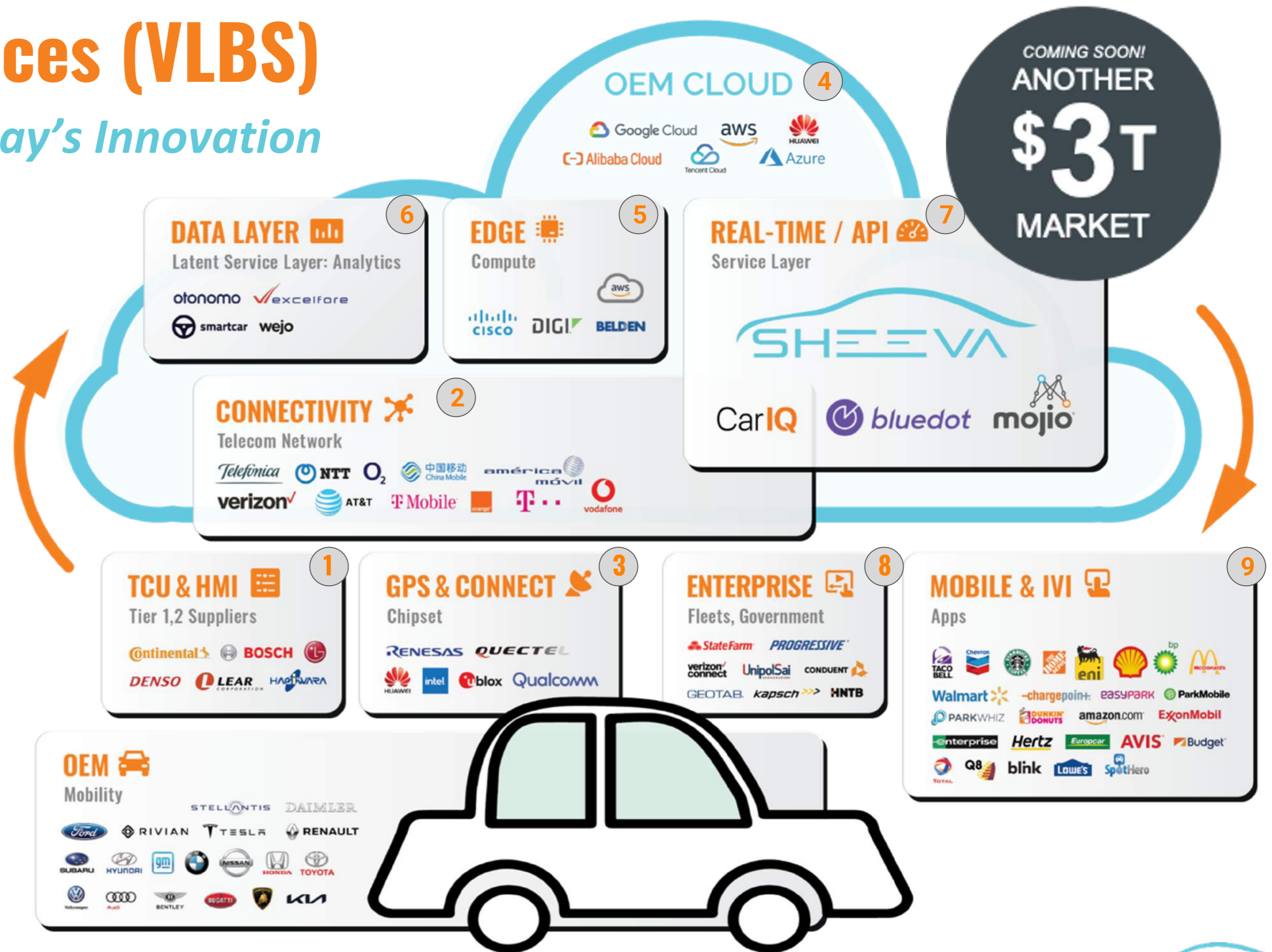
# The Ecosystem is ALREADY HERE!!! Welcome To Vehicle Location-Based Services (VLBS)

Past Learnings Accelerate Today's Innovation

## Key Players In OEM Mobility:

1. TCU & HMI - Tier 1,2 Suppliers
2. Connectivity
3. Chipset GPS & Connect
4. OEM Cloud
5. Edge Compute
6. LTL (Data) Layer - Analytics
7. Real-Time Service / API Layer - (VLBS)
8. Enterprise
9. Mobile & IVI Apps

*Sheeva fits anywhere in layers 1-4 to deliver vehicle context and payments to layers 7-9*



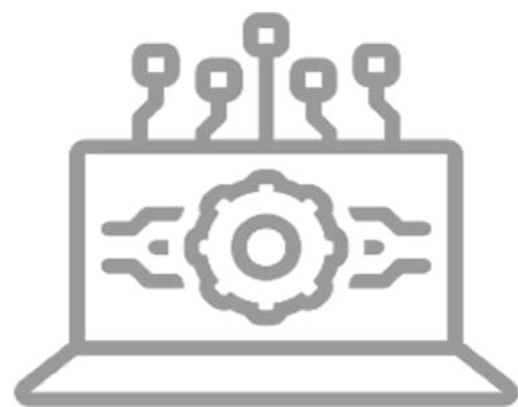
# Netflix-Like User Experience

- One sign-in per driver
- PCI-compliant payment authorization
- Easy account management



# Background Mode Is Important

- Continuous delivery of automatic services
- High-accuracy location for multiple applications
- Location-enabled payments



PLUG-AND-PLAY API



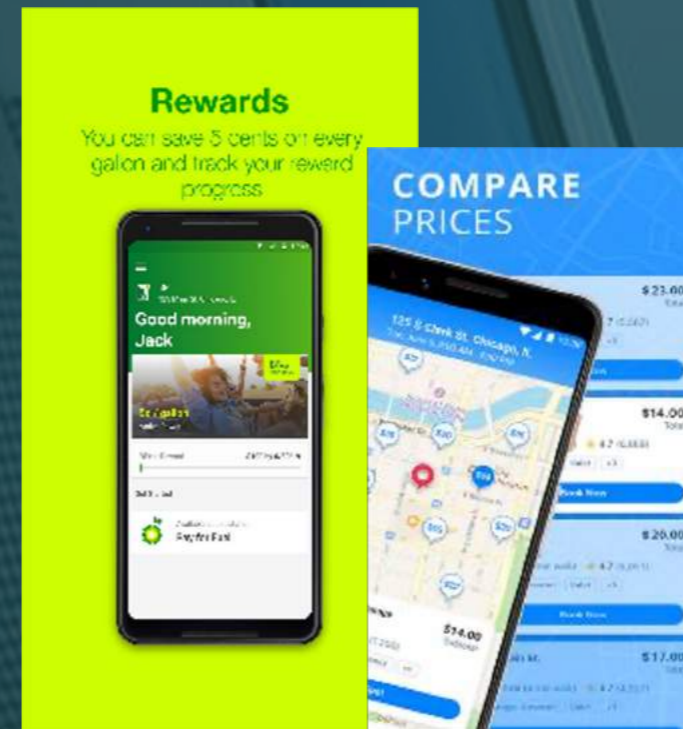
NO ARCHITECTURE  
CHANGES



BUILT-IN USE CASES  
AND TEMPLATES

# OUR APPROACH MAKES US DIFFERENT (As Easy As An API)

## Mobile apps



## Vehicle apps



# SHEEVA

# API

Sheeva delivers proprietary V-Context with sub-2 meter accuracy to direct users through existing shopping carts user journeys

- Simple, scalable, low cost, and data efficient
- One API serves all apps and services
- Taps into existing users for new distribution opportunities
- Platform Agnostic: we enhance other RTS platforms
- **Access to New Business Models while promoting real-time Customer Engagement.**

Demo 1: V-Payments Fueling and Parking

Demo 2: V-Context Dashboard and Fleet Management



# Sheeva.AI = New and Enhanced Connected Features

Sheeva.AI enables new features and can enhance existing features for current Telematics-Based systems:

- Precise geo-location (< 2-meter accuracy)
- Secure, vehicle-based payment automation
- Last-mile navigation
- Open APIs for easy integration



## Automatic Contactless Payments

Enable vehicle-based, contactless payments for Fuel, Electric Vehicle charging, road tolls, curbside pick-up and more!



## Enhanced Geo-Location, Last-Mile Services

With precise, real-time geo-location (down to the gas pump, charging station, parking spot, traffic lane, etc.), Sheeva.AI enables last-mile services of all kinds.



## Your Car, Your Wallet

Expand payment services by setting up the vehicle as your digital wallet for on-demand payments and services.



# Sheeva.AI = New and Enhanced Connected Features



## Parking Finder

Looking for parking? Sheeva.ai can reserve and guide you there. And, when you leave, your car automatically pays for you – fully contactless!



## Fuel Finder

Get alerted when fuel is low and follow the navigation to a fuel pump waiting for you. Fill up and go – payment is automatically completed on your behalf!



## Charge Station Finder

When charge is low, locate and navigate to a charging station reserved for you. After charging, just go – your car automatically authorizes payment as you hit the road.





# Sheeva.AI = New and Enhanced Connected Features



## Automatic Toll Payments

No need to worry about current tolling systems. With Sheeva.ai, your car is the toll tag and payment is processed automatically.



## Drive-Thru Assistant

Find, order, and pay for drive-thru services all through Sheeva.ai – you get guided to the right lane and payment is processed by your car for you.

## Curbside Retail Assistant

Let Sheeva.ai assist in curbside pick-up. When activated, you will be guided to a reserved parking space and your vehicle automatically notifies the store you are ready for pick-up!





# Sheeva.AI = New and Enhanced Connected Features



## Road Usage Charging

Through vehicle tracking, Sheeva.AI allows customized, specific, per-mile charging.



## Continuous Presence

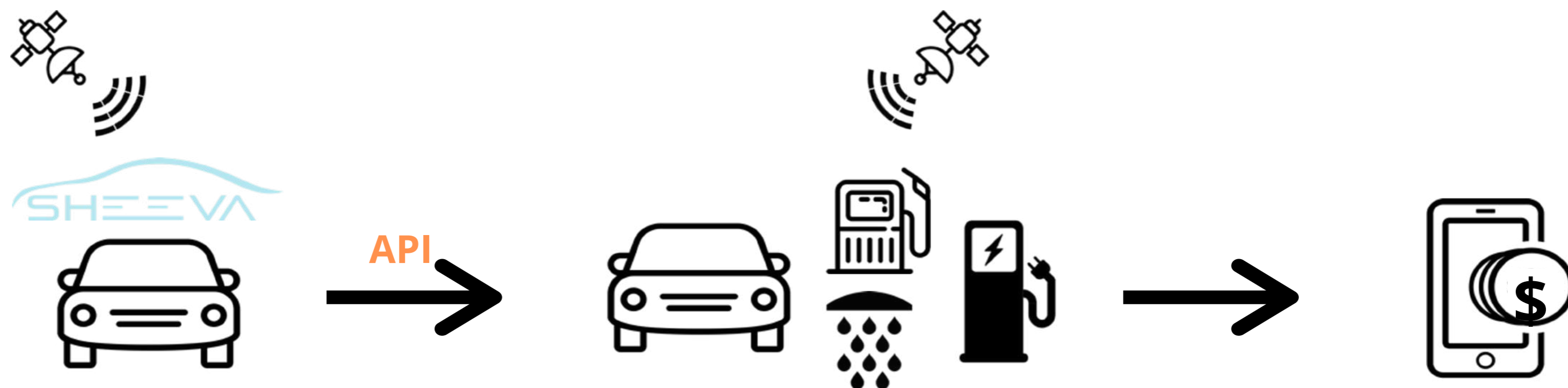
Sheeva.AI is seamlessly connected to users in real time- providing ubiquitous notifications and a continuous presence that builds customer loyalty.



## Know Your Customer

With tailored insights driving relevant offers and alerts, you can reach customers by mapping personalized promotions and just-in-time ads to contextual triggers.

# Fuel & EV Charging Demo

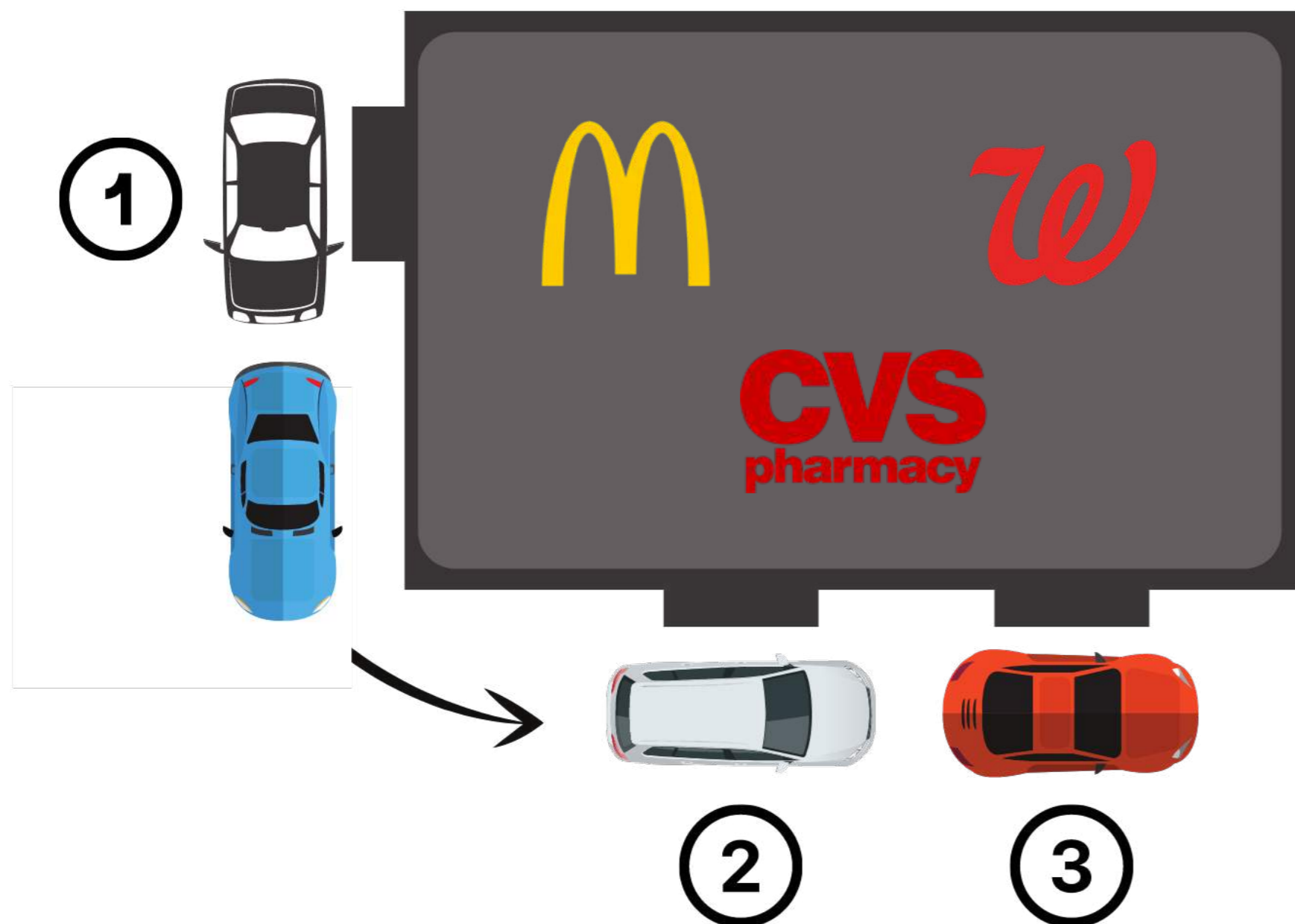


**Status:** Active

**Markets:** US, Europe, India

**Demo:** <https://www.youtube.com/watch?v=CBwaWJFyRnY>

# Drive-Through: Simplified



1. Place order
2. Automatic Payment with Sheeva.AI (no stop required)
3. Order pickup

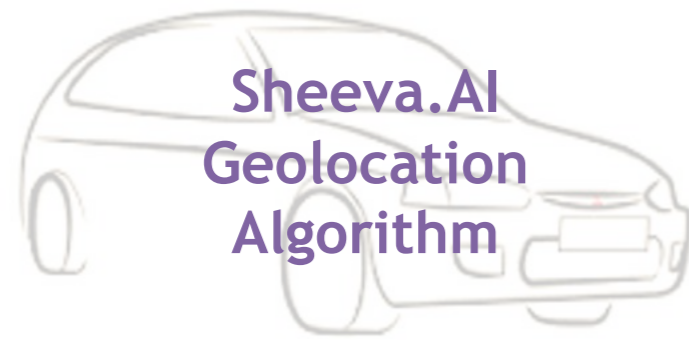
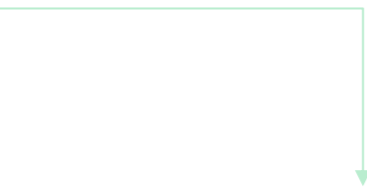
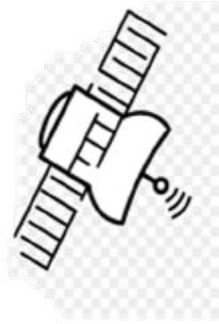


# Next-Generation Customer Engagement

- **Just In Time Targeted Ads:** offer locations and discounts based on recent purchases and visited stations.
- **Instant Surveys:** quickly reach specific customer segments via SMS or mobile app.
- **Customer Adoption:** drive customers directly to your retail outlet based on proximity and need.
- **Informed Planning:** know where customers are most likely to require locations for planning your next store location.
- **Continuous Engagement:** use analytics to understand customer needs and respond to them quickly, e.g. route and drive-through habits, morning routines, etc.

# OEM Data Flow

GNSS Data



Location Data

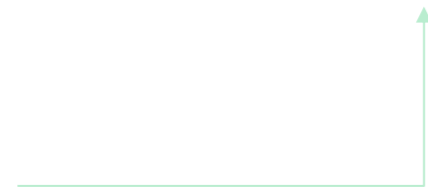


Admin Console

SHEEVA API

- vehicle\_id
- fuel\_level
- payment event
- latitude
- longitude

Motion Data



ENERGY COMPANY API

2. Payment Authorization

PAYMENT API



4. Payment Settlement and Invoicing

1. Payment authentication

3. Pump activation

Event Trigger

Car Subscription Services

Low Fuel Alert & Last-Mile Navigation to the Nearest Gas/Charging Station

Refueling / Recharging

Vehicle at Gas Pump / Charging Spot 'Y'

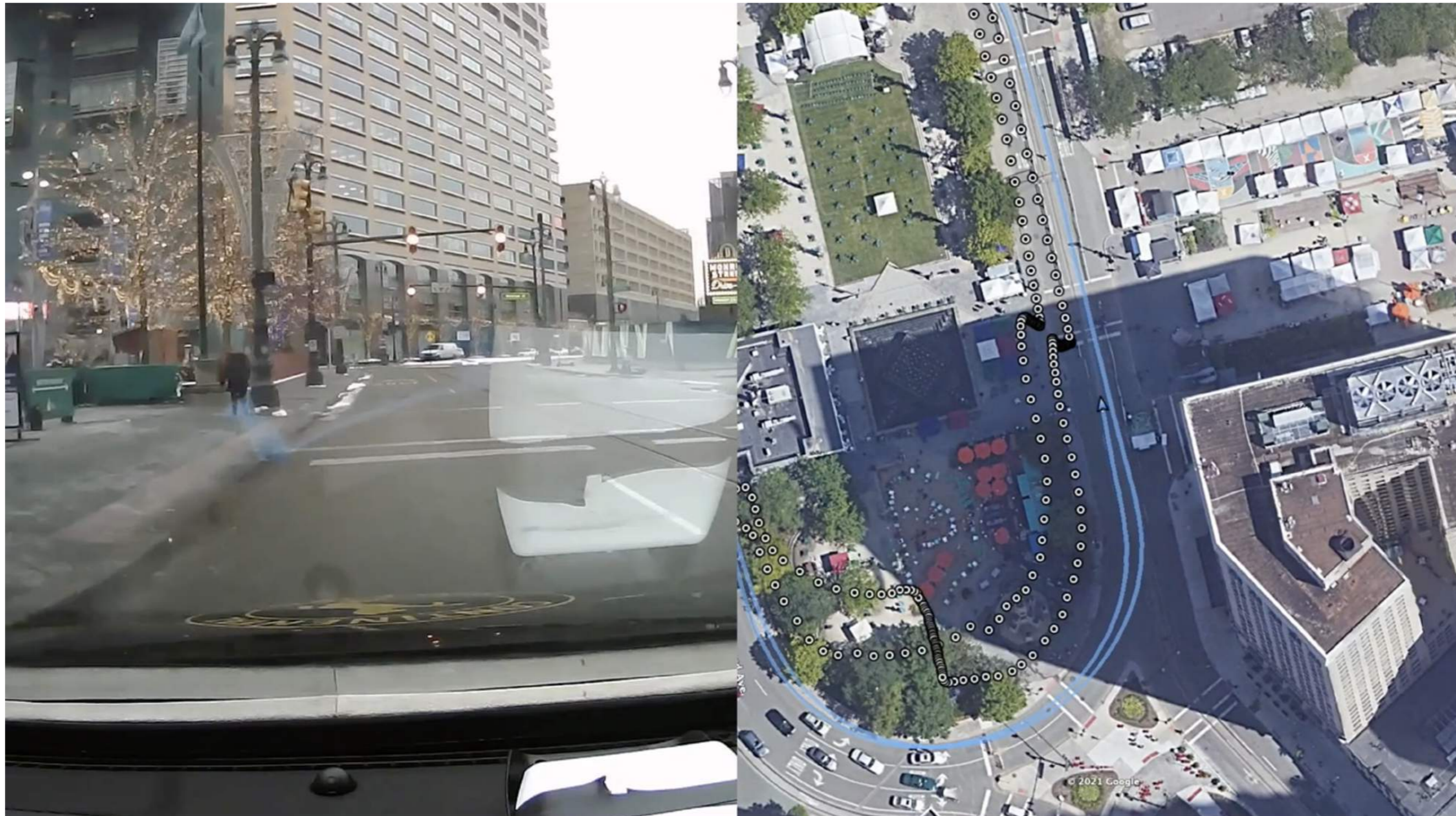


Geofenced DB

- Admin Console
- station\_id
  - pump\_id
  - fuel\_amount

- Admin Console
- user\_id
  - authorization
  - fuel amount
  - transaction\_id
  - confirmation\_id

# In-Vehicle Integration: Sheeva.AI Location Demo



- **White dots** is raw GPS data
- **Blue line** is Sheeva.AI location
- **Video** is from test vehicle dash cam

Full demo:  
<https://vimeo.com/513091661/5ff8d4abb8>

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# JOIN US

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contact@sheeva.ai

+1.855.546.7275

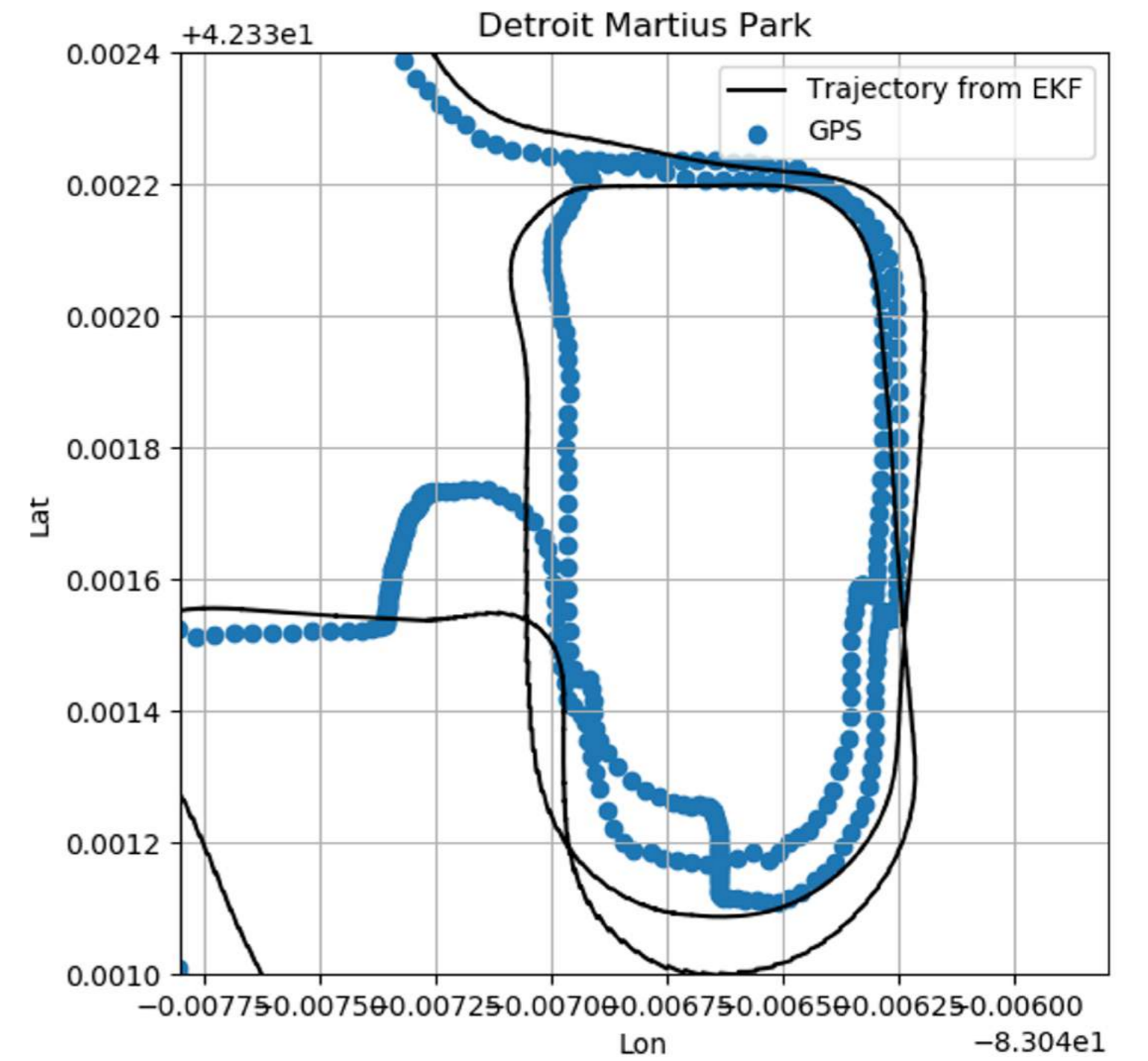
<https://www.linkedin.com/company/sheevaai>

<https://www.sheeva.ai/>





# IN-VEHICLE DEMO: DETROIT MARTIUS PARK



# IN-VEHICLE DEMO: PARKING STRUCTURE (DR)

