

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Beta Presentation

## Autonomous Vehicle Fleet Connectivity App

### The Capstone Experience

Team Aptiv

Emilio Castillo

Drew Glapa

Klint Kaercher

Chad Krause

Alexander Patton



*From Students...  
...to Professionals*

Department of Computer Science and Engineering  
Michigan State University  
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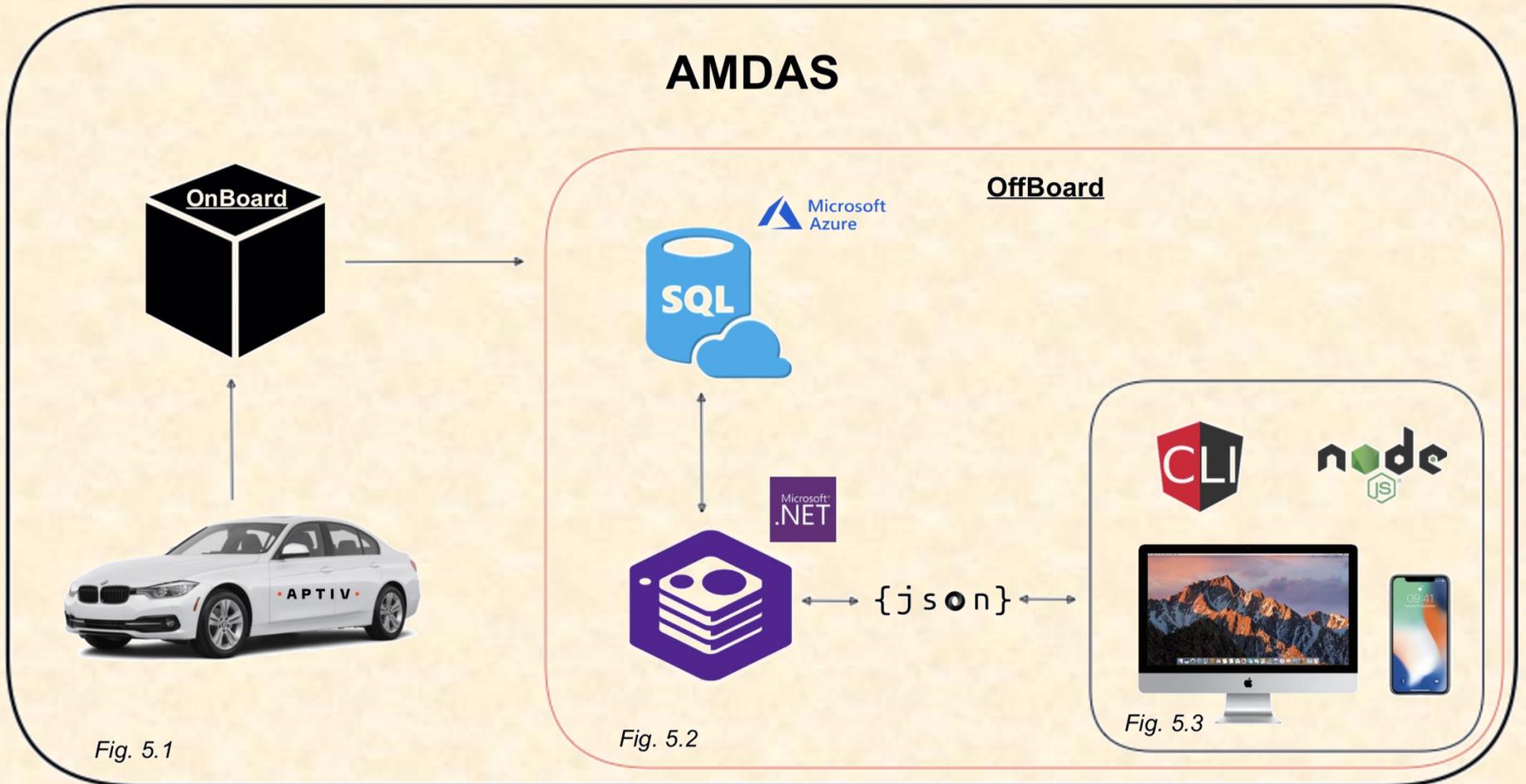
# Project Overview

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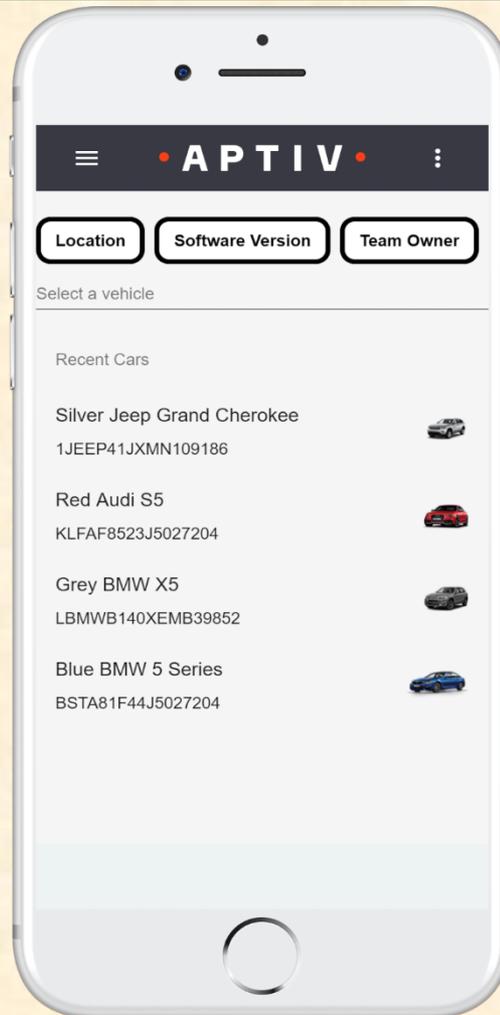
- Functionalities
  - Provide tools to manage an autonomous vehicle fleet
- Features
  - Catalogue information about vehicles
  - Send push notifications from app about vehicles
  - See real-time alerts and diagnostics of vehicles
  - Provide a driver survey at the end of scheduled testing
- Technologies
  - Angular
  - Microsoft Azure Services



# System Architecture



# Vehicle Search Page



# Vehicle Status Page

Red Audi S5  
KLFAF8523J5027204

Reserve this Vehicle Edit Vehicle

Coordinates of: Red Audi S5  
53.344, -6.236

**Live Data**

VIN	KLFAF8523J5027204
Location	Dublin, Ireland
Odometer	44586
Speed	65 mph
Current Driver	Chad Krause
Software Version	4.3.2
Warnings	<a href="#">View</a>

Upcoming Reservations

There are no upcoming reservations for the Red Audi S5.

# Reservation Creation Page

APTIV

Red Audi S5  
KLF8523J5027204

Vehicle Status

Type MM/DD/YYYY or choose a date.  
12/15/2018

Driver  
Chad Krause  Me

Start  
+ 8 - 00  
AM

End  
+ 11 - 30  
AM

Book Overnight

Cancel Create Reservation

# My Reservations Page

The screenshot displays the APTIV user interface for 'My Reservations'. At the top, the APTIV logo is centered. Below it, the title 'My Reservations' is shown, followed by two filter buttons: 'Upcoming' (grey) and 'Past' (blue). The main content area lists four reservations, each with a date and time, a car model, a vehicle ID, location, and driver name. To the right of each reservation is a small image of the corresponding car.

Date & Time	Car Model	Vehicle ID	Location	Driver	Image
November 1 10:30 AM	Blue BMW 5 Series	BSTA81F44J5027204	Troy, MI	Ross Maguire	
October 28 7:30 AM	Red Chevrolet Tahoe	CTFA81D2BB5027339	Dublin, Ireland	Joe Lyon	
October 25 6:00 PM	Red Audi S5	KLFAF8523J5027204	Kokomo, IN	Klint Kaercher	
October 25 4:00 PM	White Lexus LFA	JLFA81D23J5027204	Kokomo, IN	Chad Krause	
October 23 11:00 AM					

# What's left to do?

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- Aptiv engineer testing
- User permission restrictions
- In-depth browser testing



# Questions?

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