

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation

## Building Shipments Using Machine Learning

### The Capstone Experience

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

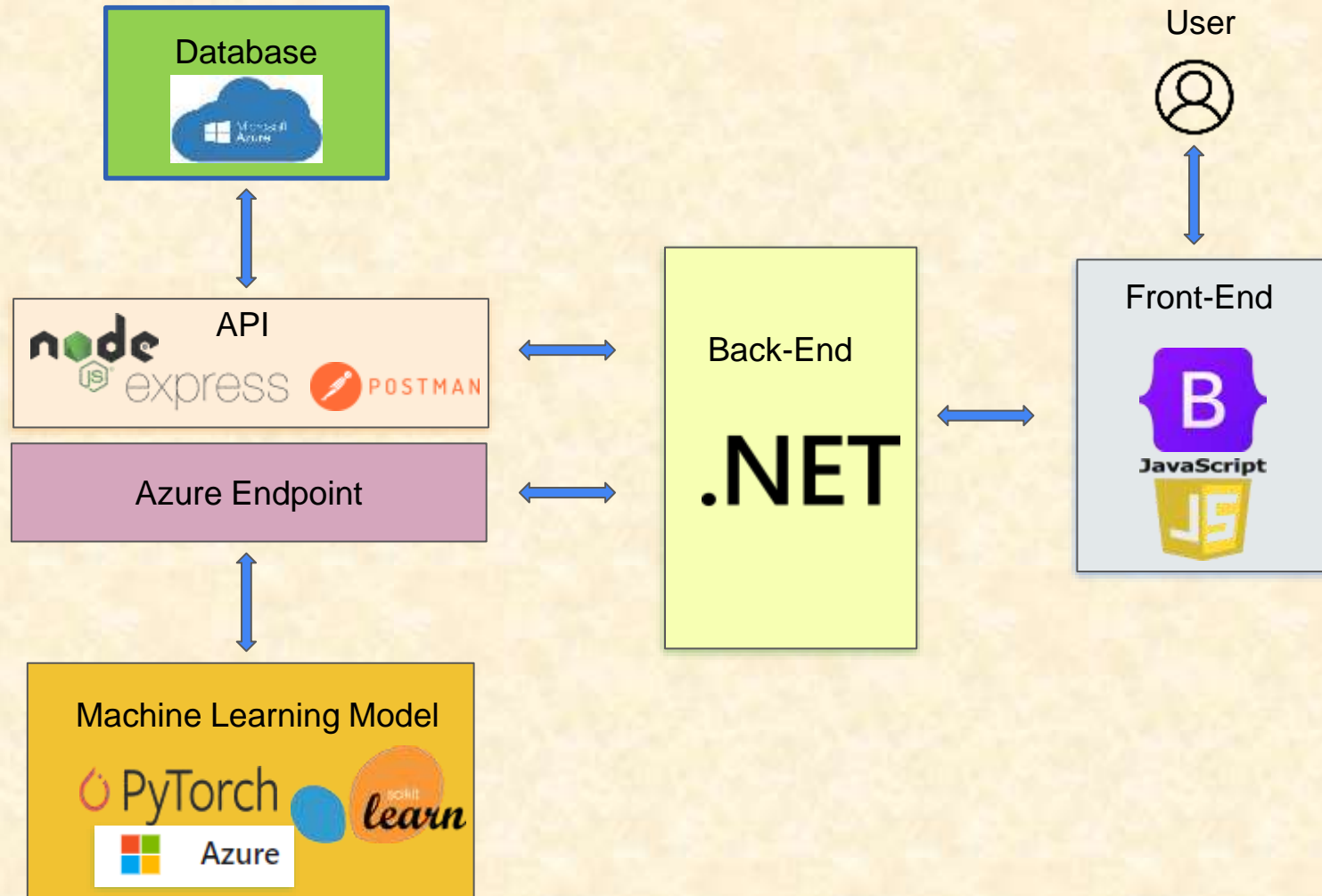
# Project Overview

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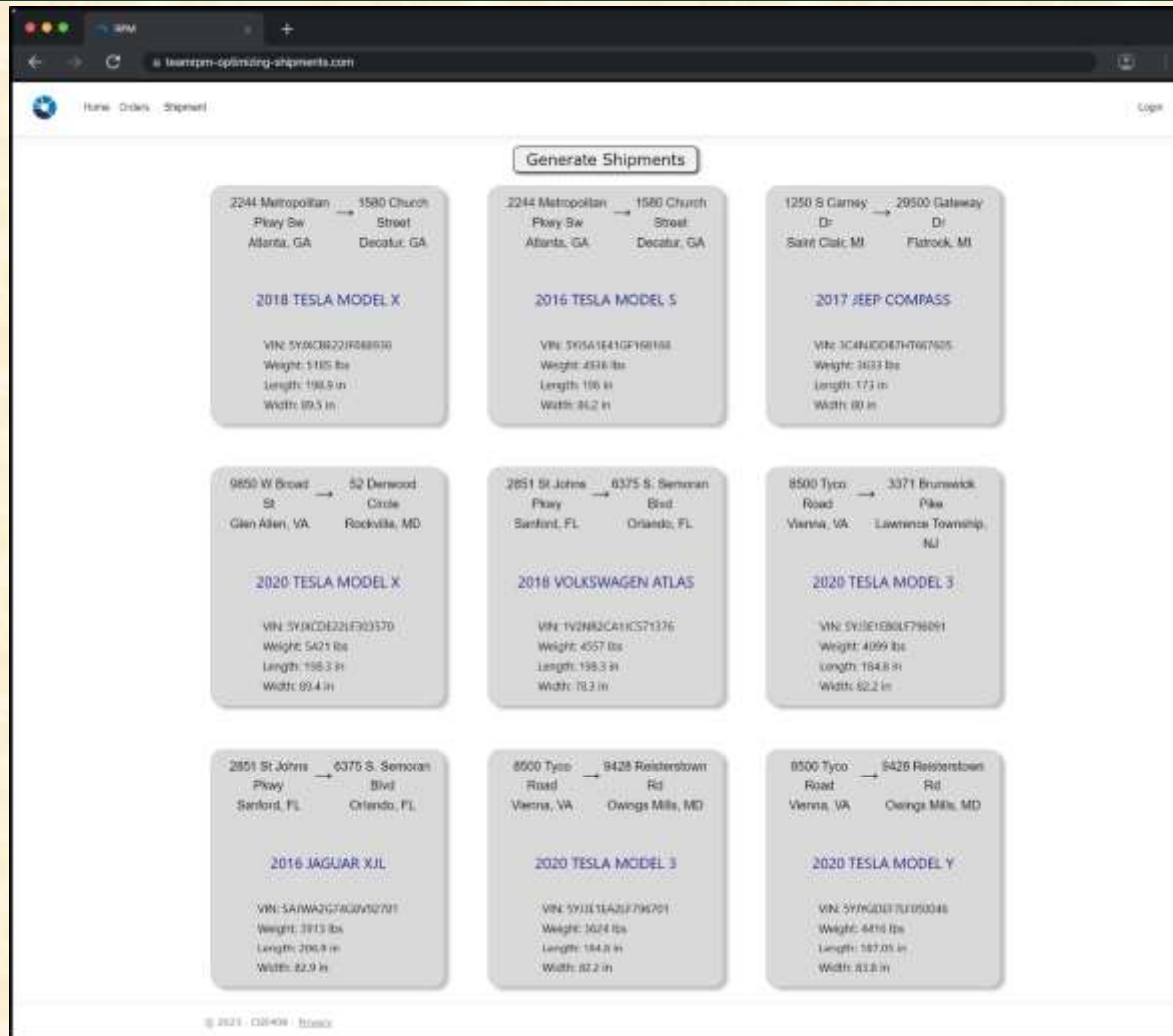
- Optimizes shipment process by creating shipments with the fewest possible stops
- Uses machine learning to cluster different orders and create shipments
- Suggest equipment type based on shipment size



# System Architecture



# Orders Page



# Shipment Page

Print Current Shipments    Print Model Shipment History

Shipment Number	Equipment Type	Stops	Departure
119	9 car hauler	4	04/06/23
120	9 car hauler	4	04/06/23
121	9 car hauler	4	04/05/23
122	9 car hauler	1	04/06/23
123	9 car hauler	3	04/05/23
124	4 car wedge	3	04/06/23

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# Shipment Information Page

The screenshot displays a web application interface for managing shipments. At the top, there is a navigation bar with 'Home', 'Orders', and 'Shipment' links, and a 'Login' button. Below the navigation bar is a 'Print This Shipment' button. The main content area is divided into two sections: a map and a table of shipment information.

The map shows a route starting in Dallas, Texas, and ending in Houston, Texas. The route is highlighted in blue and passes through several cities including Fort Worth, San Antonio, and Austin. The map includes a legend, a search bar, and a 'New Street View' button.

Below the map, there are two tables: 'Shipment Information' and 'Orders Information'.

Shipment Information		Orders Information									
Shipment Number:	624	VIN	Make	Model	Year	Weight	Length	Height	Width	Origin	Dest
Origin	5800 Democracy Drive, Plano, TX	4T1B81H800J047300	Toyota	Camry	2018	3395 lbs	192.7 in	66.9 in	72.4 in	5800 Democracy Drive	15447 W. Interstate 30
Drop Off	9320 Rental Car Rd, Austin, TX	JTHBL5E6C511559	Lexus	LS 450	2012	4244 lbs	190.2 in	68.1 in	71.8 in	9500 Cedar Springs Road	15447 W. Interstate 30
Departure Date	04/06/23	5N1AZ2M580N154225	Nissan	Murano	2019	3968 lbs	190.8 in	67.8 in	75.4 in	5333 W. Keesel Blvd	13100 Gulf Freeway
Status	In Progress	4T1G1HAK0JL578511	Toyota	Camry	2021	3340 lbs	192.7 in	66.9 in	72.4 in	2837 S 26Th Ave	9320 Rental Car Rd
Equipment Type	4 car wedge										
Number of Stops	3										

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# Order Entry Page

Home Orders Shipment Login

## ORDER ENTRY

Move on with orders in the database?

[Continue Without Upload](#)

Add a CSV file or Excel File here:

No file chosen

Or manually enter order details in the table below

VIN

Vehicle Year

Vehicle Make

Vehicle Model

Pick-up Location Name

Pick-up Address

City

State

Zip

Delivery Location Name

Delivery Address

City

State

Zip

[Place Order](#)

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# What's left to do?

- Features
  - Print Feature
  - Email Feature
- Stretch Goals
  - Carrier Recommendation
- Other Tasks
  - Login Validation
  - Fix Bugs
  - Redeploy Refined Models





# Questions?

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