

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation

Driven Connect Application, Server, and  
Backend

The Capstone Experience

Team DRIVEN-4

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

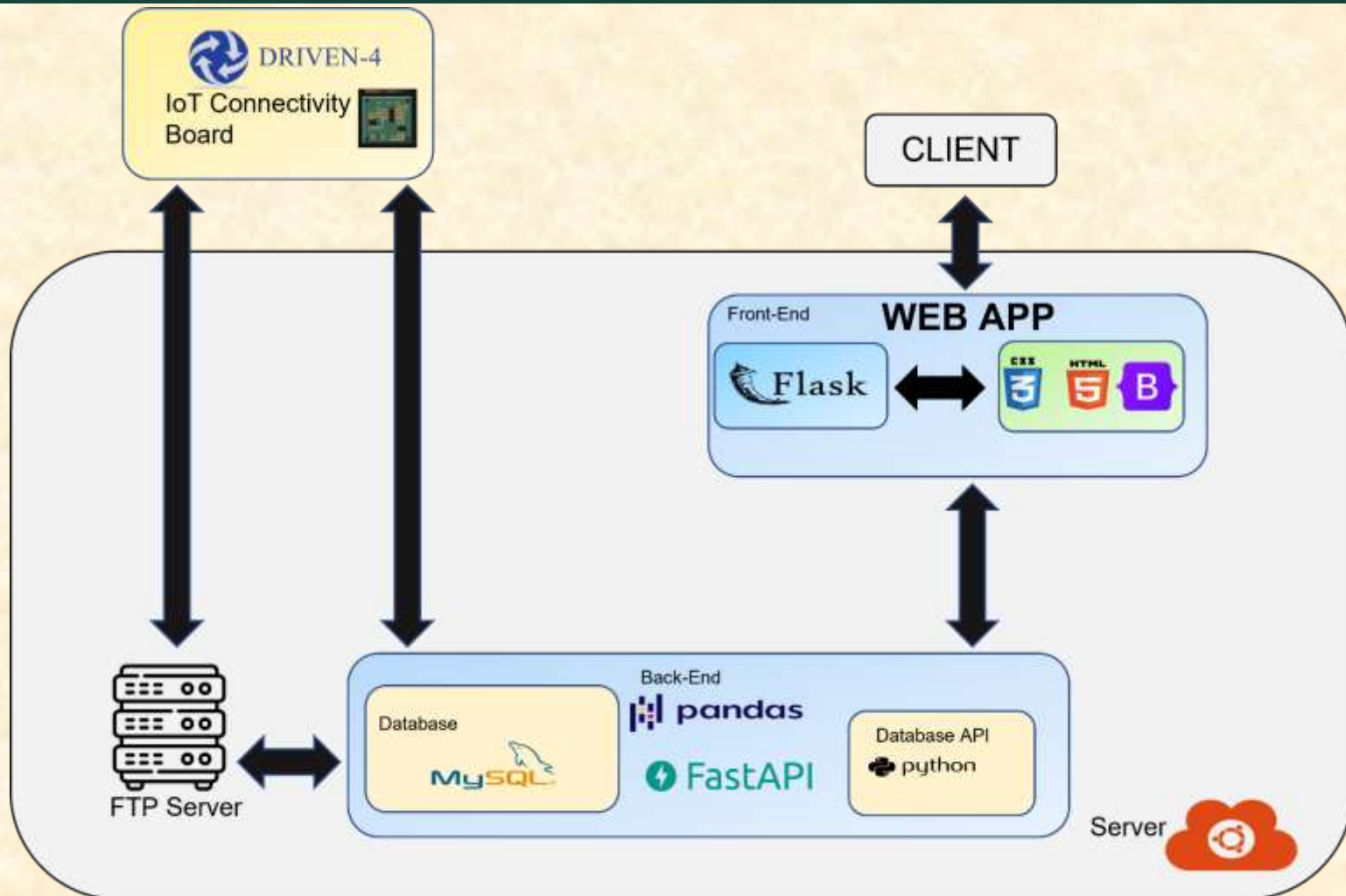
# Project Overview

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- DRIVEN-4
  - Founded in 2016 & based out of St. Joseph, MI
  - Technological solutions to clients in PLM, IoT, IIoT, and cyber security
  
- Products
  - Driven Connect Board soon to be released
  - Driven Connect Application to interact with boards



# System Architecture



# Admin Dashboard

The screenshot displays the DRIVEN-4 Admin Dashboard. At the top, it says "Welcome Tim | tim@timstrucking.com | admin". The left sidebar contains navigation links: Home, Device Management, Data Analysis, User Management, Account Settings, Billing, and Logout. The main content area is titled "Home" and "Status | Module Info". It features three summary cards: "Total Active Boards" (2), "Total Non-Active Boards" (1), and "Total Boards" (3). Below these are two detailed cards: "Active" (Port 1 and Port 2) and "Non-Active" (Port 3), each showing serial and IMEI numbers. A "Subscription Information" card on the right lists modules, costs, and usage. At the bottom right, two circular progress indicators show "78.88% STORAGE(GB)" and "55% TRANSMITTED(MB)".

DRIVEN-4

Welcome Tim | tim@timstrucking.com | admin

Home

Status | Module Info

Total Active Boards 2

Total Non-Active Boards 1

Total Boards 3

Active

Port 1 Serial No.: 456973-0002-1234 IMEI: 350037120901234

Port 2 Serial No.: 456973-0002-5678 IMEI: 350037129905678

Non-Active

Port 3 Serial No.: 456973-0002-9012 IMEI: 310037120909012

Subscription Information

Modules Deployed: 3

Monthly Deployment Cost: \$45.00

Data Allotment: 16.00 MB

Data Used: 12.62 MB

Subtotal: \$45.00

Sales tax(8%): \$2.7

Total: \$47.7

78.88% STORAGE(GB)

55% TRANSMITTED(MB)

Logout



# Device Management

The screenshot shows a web browser window displaying the DRIVEN-4 Device Management interface. The browser's address bar shows the URL `127.0.0.1:5000/device-management`. The interface features a dark blue sidebar on the left with navigation links: Home, Device Management (highlighted), Data Analysis, User Management, Account Settings, and Billing. At the bottom of the sidebar is a Logout link. The main content area has a white background with the DRIVEN-4 logo at the top right. Below the logo, a welcome message reads "Welcome Tim | tim@timstrucking.com | admin". The "Device Management" section is titled and contains two main panels. The "Devices" panel on the left includes a search bar with a "Search" button, a "Search by:" dropdown menu with radio buttons for "Name", "ID", and "Status", and an "Upgrade All" button. Below this are three device entries, each with a "Name", "ID", "Ver.", and "Status" field, followed by a "Download" button and a gear icon. The first two devices are "Active" and the third is "Inactive". The "Quick Actions" panel on the right contains a single "Select Firmware Upgrade" button. A "BACK" button is located at the bottom left of the main content area.

127.0.0.1:5000/device-management

127.0.0.1:5000/device-management

DRIVEN-4

Welcome Tim | tim@timstrucking.com | admin

Device Management

**Devices**

Search:  Search

Search by:  Name  ID  Status

[Upgrade All](#)

Name: Port 1	ID: 1	Ver: timstruckingV2   1.00.00	Status: Active	<a href="#">Download</a>	
Name: Port 2	ID: 2	Ver: timstruckingV2   1.00.00	Status: Active	<a href="#">Download</a>	
Name: Port 3	ID: 3	Ver: timstruckingV1   1.00.00	Status: Inactive	<a href="#">Download</a>	

[BACK](#)

**Quick Actions**

[Select Firmware Upgrade](#)

Logout



# Device Info

The screenshot displays the DRIVEN-4 web interface. The browser address bar shows the URL `127.0.0.1:5000/devices/1`. The interface includes a blue sidebar with navigation options: Home, Device Management, Data Analysis, User Management, Account Settings, and Billing. The main content area is titled "Device Information" and contains several panels:

- Device Info:** Displays details for "Port 1", including Name, Serial No. (456973-0002-1234), IMEI (350857120901234), Processor Id (1234), and Active Time (2023-02-20 13:00:00).
- Updates:** Shows the current version as 1.2.20 and provides a "Check for Updates" button. Below it, a list of previous versions (1.2.21, 1.2.19, 1.2.18) is visible.
- Change Logs:** A scrollable list of log entries, each containing a timestamp and the text "test".
- All Firmware Versions:** A panel with a "Visit Page..." button.
- Logs:** A scrollable list of log entries, identical to the Change Logs panel.

A "Logout" button is located at the bottom of the sidebar. The DRIVEN-4 logo is positioned in the top right corner of the main content area.



# Data Modeling

The screenshot displays the DRIVEN-4 Data Modeling interface. The left sidebar contains navigation links: Home, Device Management, Data Analysis, User Management, Account Settings, and Billing. The main content area is titled "Data Modeling" and includes a "Welcome Tim" message with user details. The interface features several configuration sections: "Data Type" with radio buttons for distance, temperature, and relative humidity; "Boards" with radio buttons for Port 1, Port 2, Port 3, and a "Select All" checkbox; "Date Range" with two date input fields; and another "Data Type" section with radio buttons for Line, Scatter, and Bar. A "Graph" button is located below these sections. At the bottom, there is a search bar and a "Search by" dropdown menu with options for Name, ID, and Status.

**Data Modeling**

Welcome Tim | tim@timstrucking.com | admin

**Data Type:**  
 distance  temperature  relative humidity

**Boards:**  
 Select All  Port 1  Port 2  Port 3

**Date Range:**  
mm/dd/yyyy - mm/dd/yyyy

**Data Type:**  
 Line  Scatter  Bar

**Graph**

Search:  Search

Search by:  Name  ID  Status

**Avg. Distance (Meters) 2023-01-01 - 2023-04-01**

Day	Avg. Distance (Meters)
0	14.85
20	15.00
25	15.05
40	14.98
60	14.95
80	15.10
90	15.20





# What's left to do?

- Features
  - Data analytics
  - Logs across the Web App
- Stretch Goals
  - Loading bar for firmware
  - Custom queries
- Other Tasks
  - Front end changes
  - Code documentation





# Questions?

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