StellarAi™

DriveTech INTELLIGENCE™
Making sense of Data

Complete Test Data Sourcing, Validation & Analytics

- Cross-vertical Test Data Management
- Automated Data Analysis & Reports
- Dashboards for enterprise collaboration
- Data prediction models for your specific applications
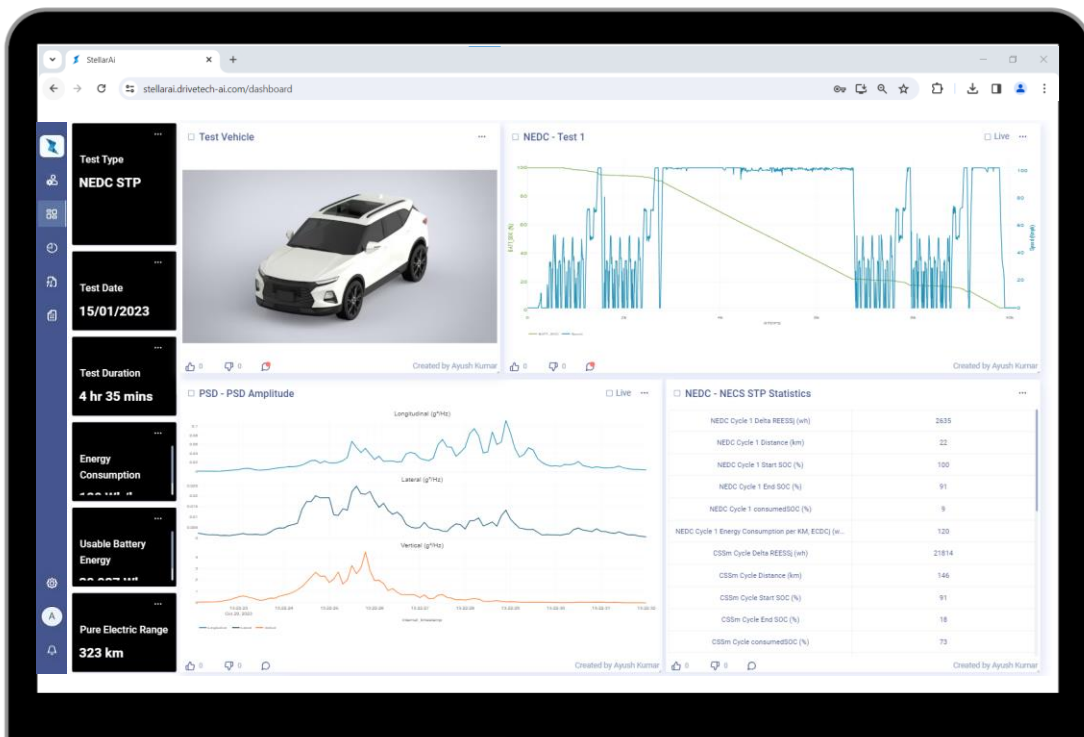
Agile   **Customized**   **Optimized**   **End to end Analytics**

Date	Test
05/01/2024	BMS Cell Balancing

☐ HV Battery Pack E04

AG - Actual vs Limit Current ☐ Live
AG - Actual vs Limit Voltage ☐ Live

Cell 1 Max Temp	Cell 2 Max Temp	Cell 3 Max Temp	Cell 4 Max Temp
23.6 °C	23.2 °C	23.4 °C	23.9 °C

AG - Iteration 1 ☐ Live
AG - Iteration 2 ☐ Live
AG - Iteration 3 ☐ Live

Created by Ayush Kumar

Data Management

Automations

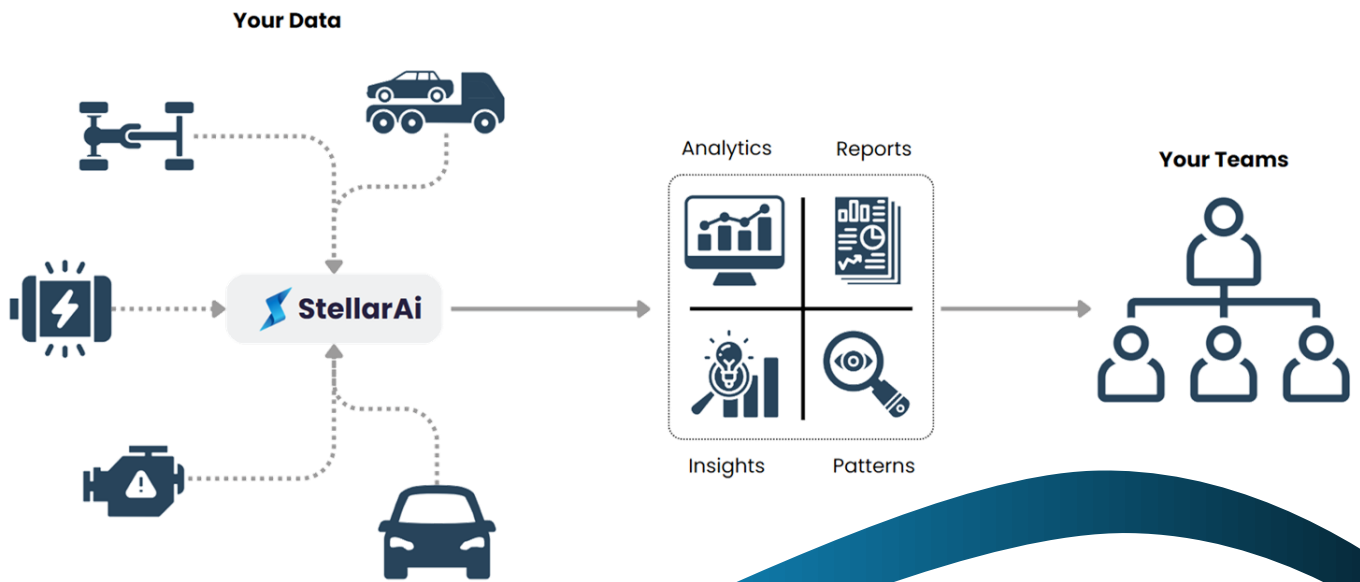Collaborations

AI / ML Predictions

Overview:

StellarAi by DriveTech Intelligence is a revolutionary platform for Automotive Test Data Sourcing, Analysis, Collaboration and Management. It uses state of the art data analytics concepts, coupled with data pipelines and collaborative functionalities to make your test data analytics processes fast, simple and more accurate. It helps you make the most out of our data, automates bulk of data analysis & post processing, saving you valuable time and resources.

StellarAi is the perfect platform to deploy purpose built AL / ML models on your Test Data; helping you get data predictions, pattern detections and prescriptive suggestions.

StellarAi is modular and fully customizable to suit your specific use cases; with the flexibility of on premise / on cloud deployment.

Workflow:

Your Data

Analytics   **Reports**

Insights   **Patterns**

Your Teams

Application Areas:

All Measured Test Data

All Manual Test Data

EV Range Testing

Reliability / Durability Testing

DTC Mgmt. & Analytics

Vehicle Specifications

Vehicle Benchmarking

ARAI
iCAT
Homologation Testing

RDE Testing & Analytics

HVAC Testing

Test Bench

CAN MF4
CAN Log Analysis

Data Management
Secure & on-demand access

Approach

OEMs invest significantly in test data collection. Effective test data management is key to fully utilizing this resource. StellarAi establishes secure pipelines with data sources, consolidates & organizes data in all formats and ensures controlled on-demand access.

StellarAi enables automated data flows, minimizes manual intervention; providing a multi-layered platform for swift analytics. This sets the stage for deploying AI/ML models, offering OEMs an efficient, secure & world class solution.

Value Delivered:

• Manual data sharing is eliminated

• All Data is consolidated in a secure repository; neatly segregated under Projects & datasets

• Events-based Data search & Trigger-based data flows

• Merge-plot billions of data points across multiple files

• Critical data such as – DBCs files can be managed with complete control.

Secured

Data Pipelines

Organized

Data Flows

Reuse Analysis

Set Data Triggers

Live Analysis

Save Time

Automation
Excellent savings on **time & resources**

Approach:

Test Engineers dedicate substantial time to manual data analysis, especially in routine tests. The challenge intensifies with repetitive analysis, involving multiple software tools for each step, highlighting the need for improvements.

StellarAi, grounded in 'Automation,' lets Engineers automate nearly all analyses using standard functionalities. DriveTech's custom 'Templates' further automate complex and nuanced workflows, offering efficiency beyond the standard software features.

Value Delivered:

• Analysis is configured once and can be reused endlessly.

• Calculations and visualizations on a single click.

• Trigger-based analysis workflows can be set up.

• Pseudo-real time Data analysis on live, incoming data

• Up to >50% Savings in time and efforts due to elimination of manual activities.

Enterprise Collaboration
Seamless teamwork & Faster decisions

Approach:

Team Collaboration often gets overlooked by test data analytics software, despite being crucial for improving team efficiency

StellarAi addresses this by seamlessly integrating collaboration functionalities, allowing engineers to share analyses instantly and gather team feedback through a collaborative dashboard.

Once ready, data analyses can be quickly added to a report which too can be shared with the team for discussion and finalization.

Value Delivered:

• Collaboration & data analysis are available under a single platform.

• Precious time and efforts are saved in arriving at decisions.

• StellarAi provides clear context to team discussions

• The entire decision timeline is maintained meticulously for full traceability.

Seamless Work

Faster Decisions

Time is Saved

Full Traceability

Pattern Recognition

Outlier Detection

Map Decisions

Reduce Skill Dependency

AI/ML Prediction Models
Purpose built for each use cases & dataset

Approach:

StellarAi, founded on core principles of data management, automation, & collaboration, is the ideal platform for deploying AI/ML prediction models. DriveTech's experts analyze specific use cases to develop targeted algorithms for precise predictions, capturing nuanced details.

Beyond conventional methods, StellarAi integrates not just historical data but also considers human-made decisions to overcome challenges from time to time; enabling OEMs to capture Team wisdom in an intelligent system.

Value Delivered:

• Prediction models that are right for each use case and data.

• Reduced skill dependency

• OEMs gain valuable IP in form of proprietary prediction models.

• Continual product improvement with AI / ML based insights.

Value Propositions & Functionalities:

Value Propositions	Functionalities
Manage Data	- Centralized Data Repository. - Automated data quality checks & searches. - Merging & plotting large files.
Save Time	- End-to-end automated analysis. - Built-in collaboration capabilities. - Automated intelligent reporting.
Save Cost	- Supports all file formats (message & signal data). - Eliminates need for multiple software. - All test data analytics processes under one roof.
Capture Learnings	- Captures organizational wisdom. - Detects patterns / trends / anomalies; provides intelligent suggestions. - Enables deployment of targeted problem solving ML models.

Deployment Models:

On Cloud:

- Deployed on Private / Public Cloud.
- Compatible with:
    - MS Azure.
    - AWS.
    - Google Cloud Platform.
    - Other 3rd Party Cloud Service Providers.

Recommended for low scale deployments.

On Premise:

- Deployed on a server grade machine physically located within OEM's premises.
- Connected to each User System via OEM's intranet.

Recommended for low scale deployments.

License Models:

- Annual User-based subscriptions.
- Customized 'Templates' and other developments supported separately on a case to case basis.
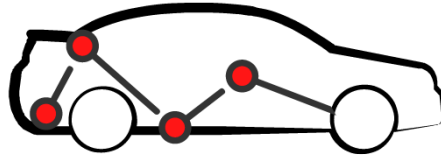
StellarAi ™

Functionalities

Functionalities	Basic	Professional	Enterprise
Data Management	✓	✓	✓
Data Quality Checks	✓	✓	✓
Threshold & Visual Analysis	✓	✓	✓
GPS Visualization	✓	✓	✓
Analysis Automations	✓	✓	✓
Comparative Analysis	✓	✓	✓
Advanced Event-based Data Search	✓	✓	✓
Data Merge & Plot	✓	✓	✓
Collaborative Dashboard	✓	✓	✓
Automated Reports	✓	✓	✓
Algorithmic Analysis	✗	✓	✓
Computed Information Tabs	✗	✓	✓
Computed Parameters	✗	✓	✓
Centralized DBC Management	✗	✗	✓
Message to Signal Conversions	✗	✗	✓
Raw Message Analysis	✗	✗	✓
Pre-generated Reports *	✗	✗	✓
AI / ML Prediction Models *	✗	✗	✓

*: Offered separately on a case to case basis

Transform your Data Analytics!

Start you **StellarAi** journey with a 100% Free of Cost Pilot Project: Get Shareable dashboards, Automated Insights, Reports as per your focus areas, and document formats; in a fraction of time.

DriveTech

INTELLIGENCE

Making Sense of Data...

Scan for more!

More Information:

DriveTech Intelligence Pvt. Ltd.

+91 95792 26204

moreinfo@drivetech-ai.in

www.drivetech-ai.in

Data Sourcing | Data Management | Data Analytics