

**PLUGANDPLAY**

**SILICON VALLEY  
SUMMIT**

November 18-20, 2025

PLUGANDPLAY

SV SUMMIT

# Mobility EXPO

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

Welcoming Remarks



Jacqueline Pham

Director

**PLUGANDPLAY**



Kishor Veerashekar

Senior Ventures Associate

**PLUGANDPLAY**

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

## Agenda

1:35 PM - 1:50 PM

Opening Keynote



Jason Saltzman

Head of Insights



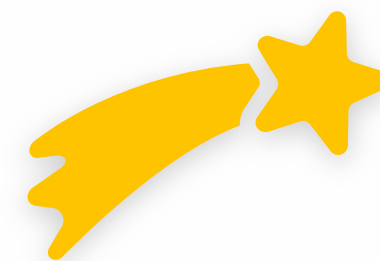
1:50 PM - 2:05 PM

Startup Pitch Session



2:05 PM - 2:10 PM

Corporate Award



2:10 PM - 2:25 PM

Keynote Speaker



Dirk Schulte

R&D Director



2:25 PM - 2:55 PM

Live Startup Demos

Akridata™  fleak



2:55 PM - 3:10 PM

Closing Keynote



Doug Warner

Head of Business Innovation



## Corporate Innovation evolving interest

2023

**415**

Startup Intros to our Corporate Network

- Wireless Charging
- EV Powertrain
- Carbon Capture
- Perception Technology
- BMS
- In Cabin Monitoring
- AV/ADAS Systems
- AI in Mobility

2024

**570**

Startup Intros to our Corporate Network

- GenAI for Enterprise
- Connected Cars
- Robotics Systems
- Smart Factories
- AI Software Designs
- EV Charge Management
- ADAS Systems
- Human Machine Interface

2025

**840**

Startup Intros to our Corporate Network

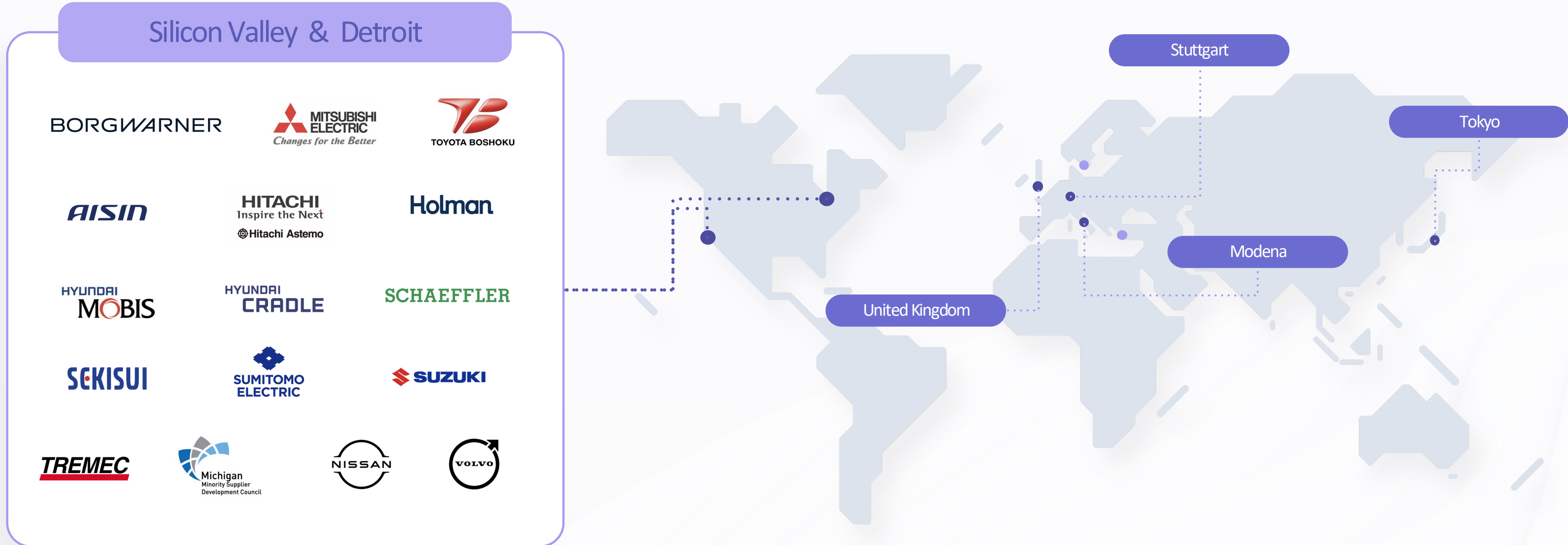
- AI for Enterprise
- Productivity Tools
- Robotics Systems
- Physical Intelligence
- AI Software Design
- Advanced Manufacturing
- Warehouse Automation
- Physical AI

# PLUGANDPLAY MOBILITY & PHYSICAL AI

Empowering the next wave of intelligent machines & transforming how the world moves.



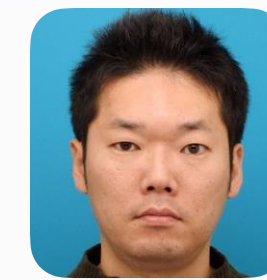
## Strengthening Cross hub collaboration



# Thank you Champions



Sunny



Yoshi



Hiro



Shige



Riki



Brooke



Cory



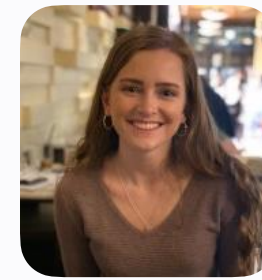
Daniel



David



Brandon



Lauren



Russell



Mitchell



Su Jin



Yuta



Yuji



Naoki



Jeff



Matt



Nate



Kevin



Jun



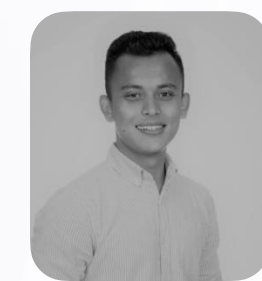
Kento



Roman



Enoch



Suvesh



Kevin



Tafflyn



Siyuan



Brendon



Takkeun



David



Andrew



Shkölqim



Ann-Sofie



Adam



Jeff



Anand



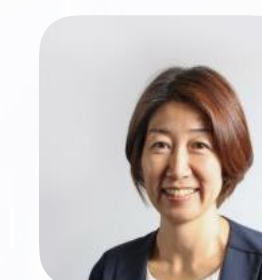
Aravind



AI



Shaila



Maggie



Naoki



Yutaka



PLUGANDPLAY

Sv summit



OPENING KEYNOTE

—  
Jason Saltzman

Head of Insights

 CBINSIGHTS

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

 CBINSIGHTS

# The Future of Robotics

November 2025



# Jason Saltzman

## Head of Insights

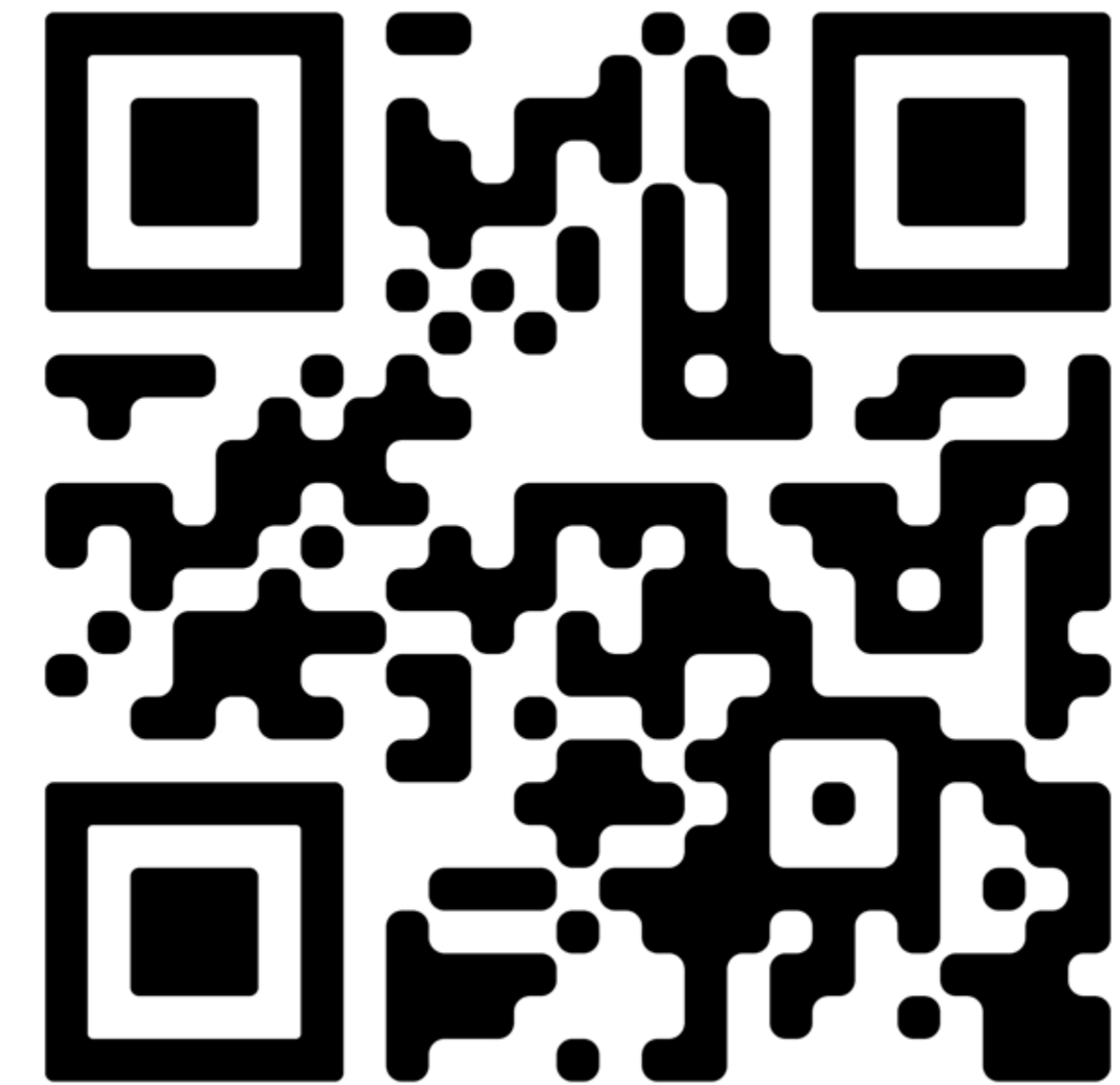
Jason leads the insights function at CB Insights, delivering predictive intelligence on the companies and technologies defining the future.

Prior to CB Insights, led marketing and insights at Live Data Technologies and built GTM teams for 25+ startups at Verbatim.

# What's your next move in Physical AI?

Find your next move, first  
with **predictive intelligence**

10-day free trial



Trusted by the world's  
smartest companies



**For the full deck, please contact the  
Plug and Play Mobility & Physical AI  
Team.**

PLUGANDPLAY

Sv summit



Startup Pitch

---

Nikhil Ramaswamy

Co-Founder

**CYN:LR**

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)



# CYN:LR

Robot that's "Intuitive" with Objects



14,000 SqFt Robotics R&D Lab

CynLr H.I.V.E.

SJR iPark, Rd No 9, EPIP Zone, Whitefield, Bangalore, India



CynLr S.A

unlimitrust route des Flumeaux 42, Prilly, Switzerland



CynLr Inc.

Suite 505, 14205 N Mopac Expressway, Austin, USA



65+ Member Team



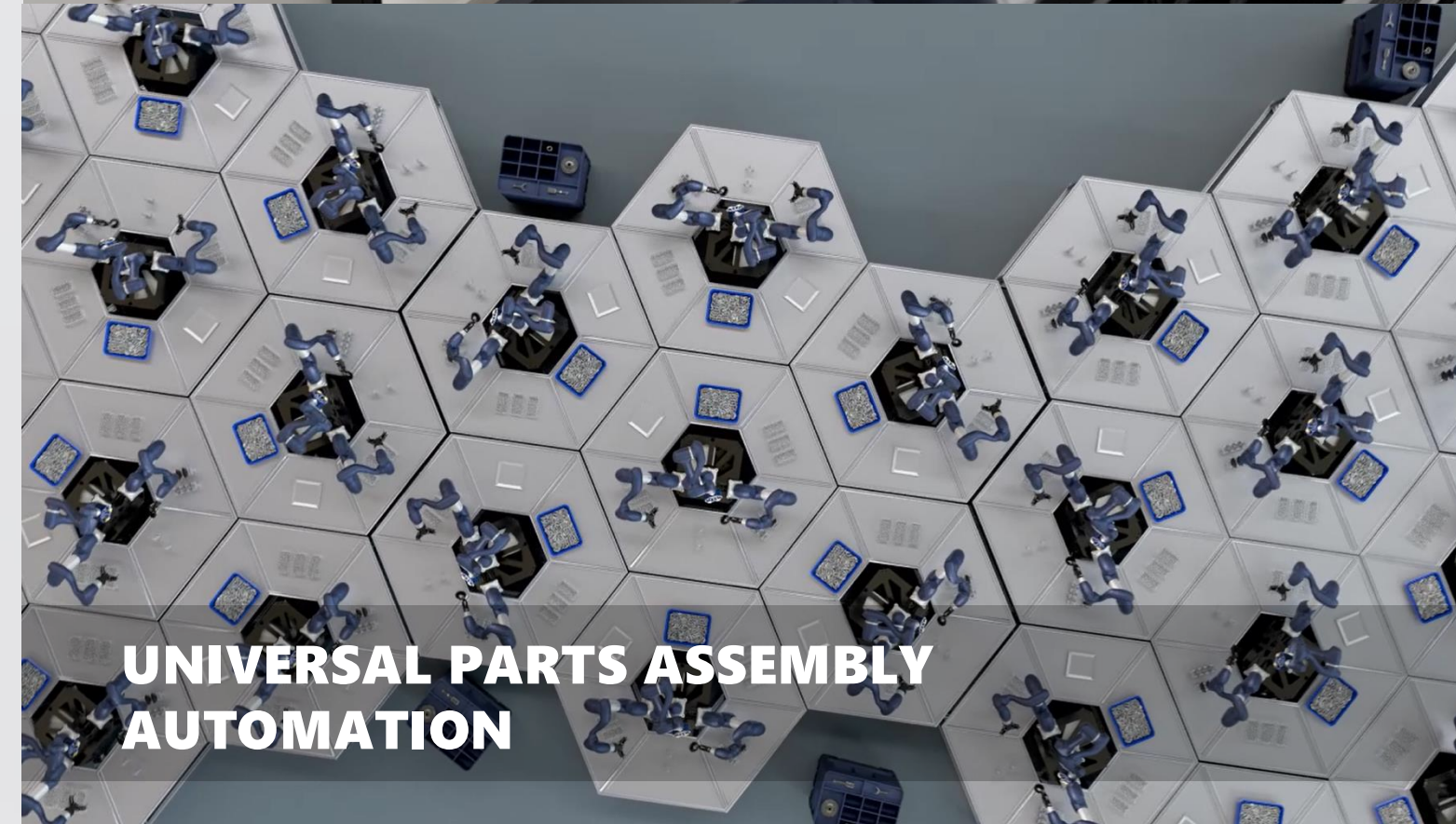
CynLr Powers Automated  
**UNIVERSAL FACTORIES**  
Through General-Purpose **Object-Computers**



**UNIVERSAL PARTS MANUFACTURING  
AUTOMATION**



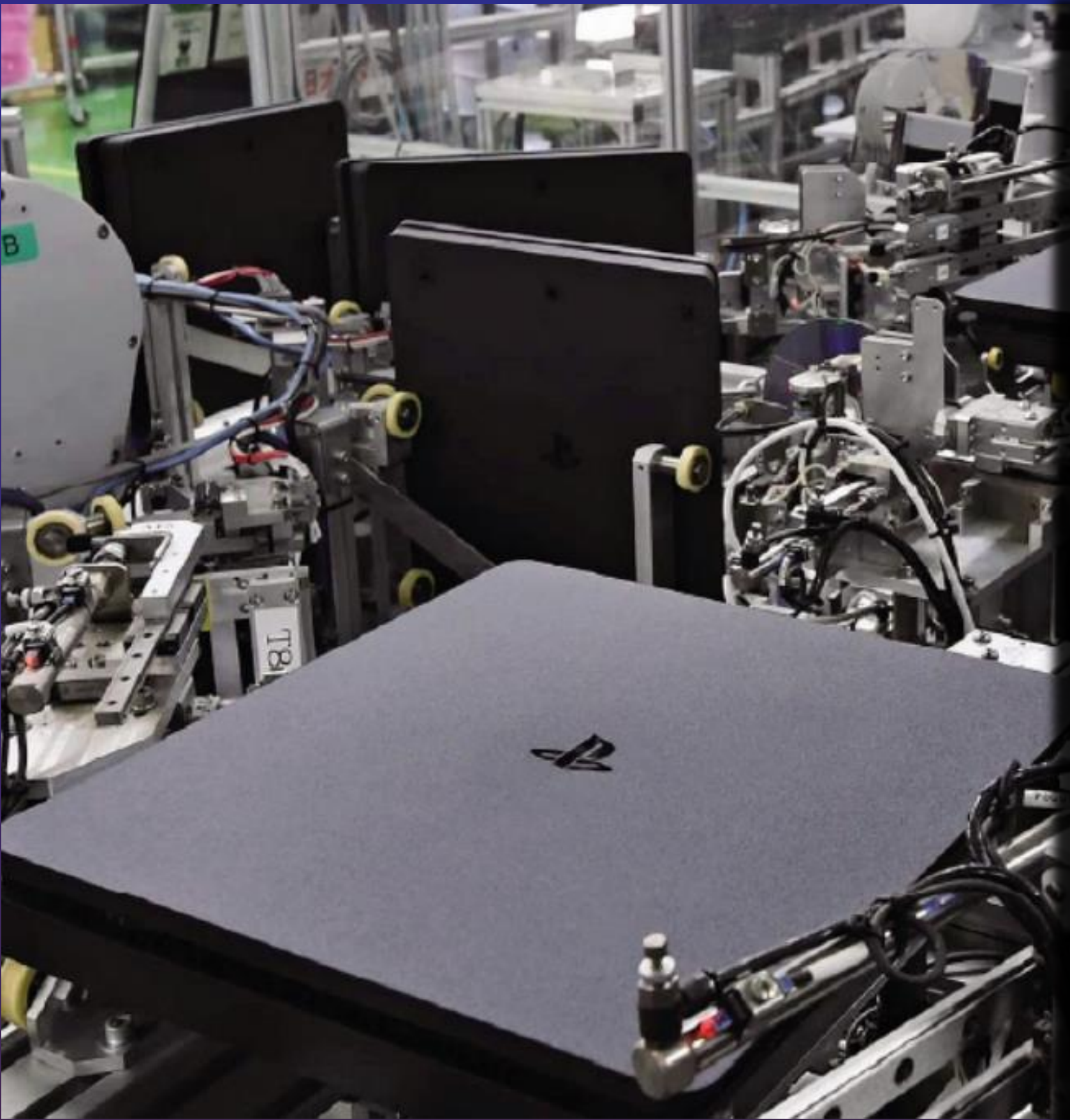
**UNIVERSAL WAREHOUSE KITTING  
AUTOMATION**



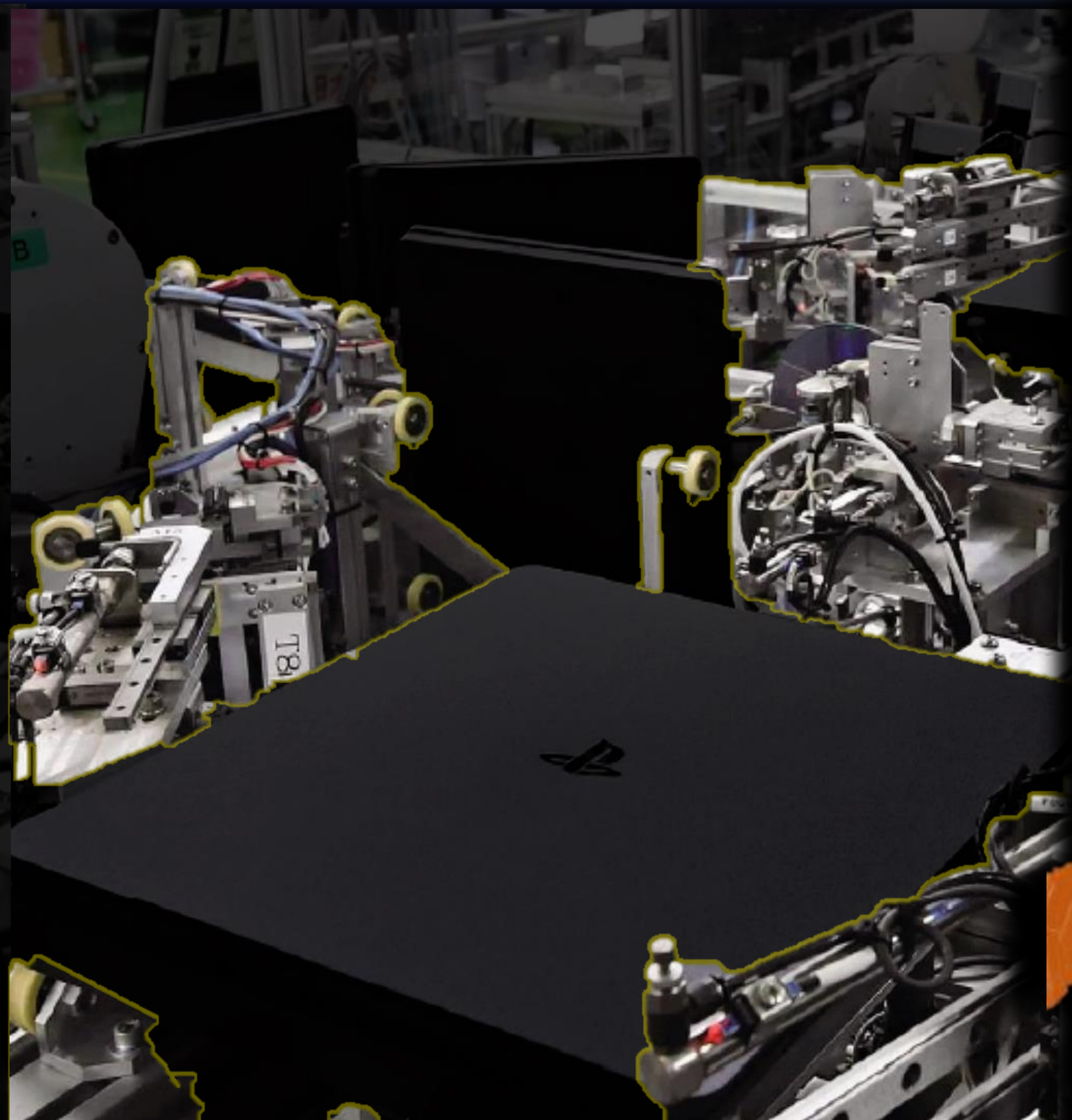
**UNIVERSAL PARTS ASSEMBLY  
AUTOMATION**



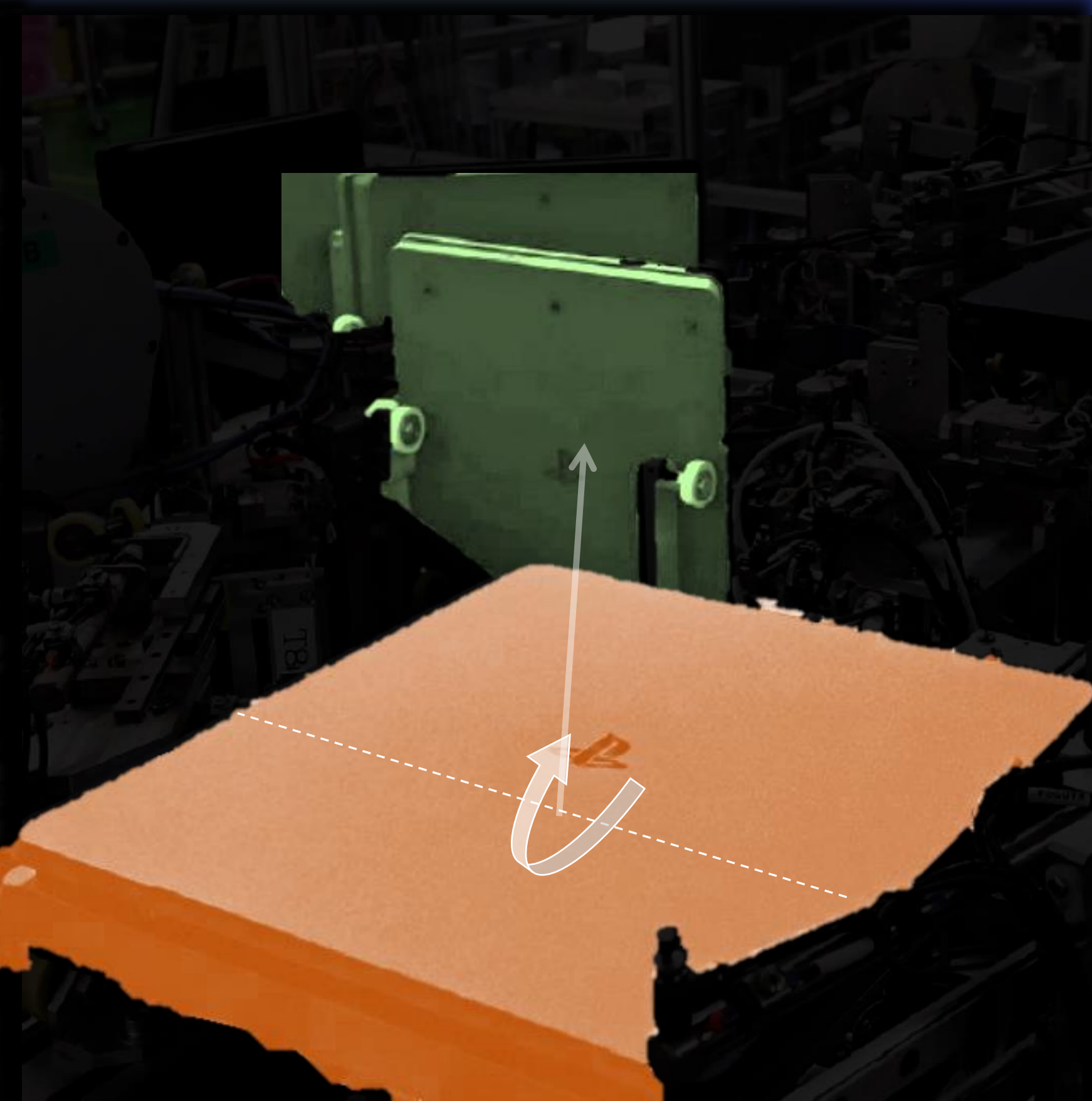
**UNIVERSAL FINAL ASSEMBLY  
AUTOMATION**



Sony PlayStation Automated  
Manufacturing



Part and Task Specific Custom Automation  
Infrastructure



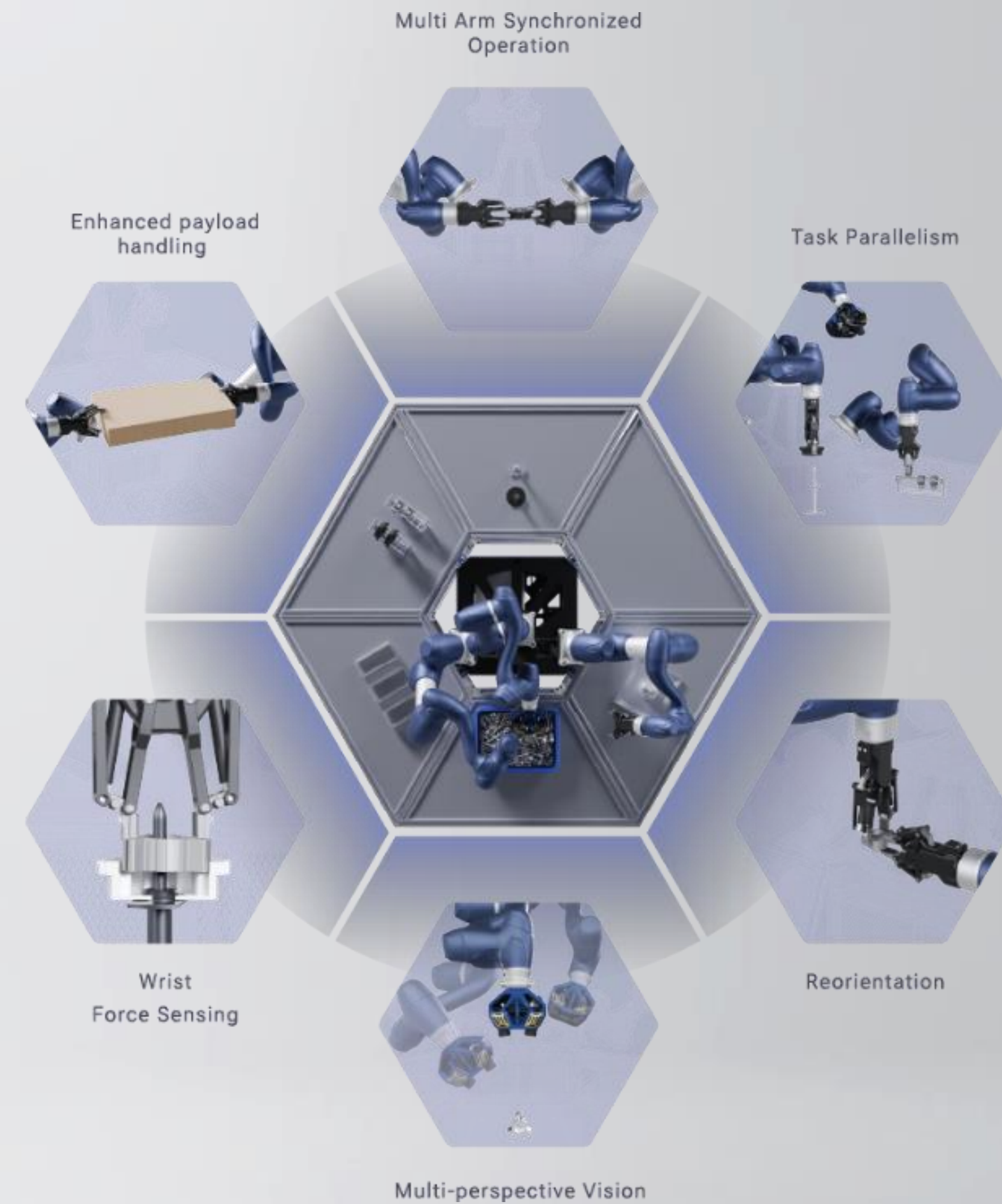
The Additional Infrastructure Simply Aid  
Re-Orienting & Re-Locating the Parts

Automation Only Feasible When Tasks and Objects Remain Static / Constrained to Arrive Rigidly, At the Right Time and Right Place

# DYNAMIC TASKS NOT AUTOMATABLE (>80% of Assembly)



CyRo is a Multi-Arm, Modular, General-Purpose, Dexterous Robot with Visual Intelligence that can intuitively pick any object **without object training**, and can be quickly configured for complex manipulation tasks



00:00

CYN:LR



00:00

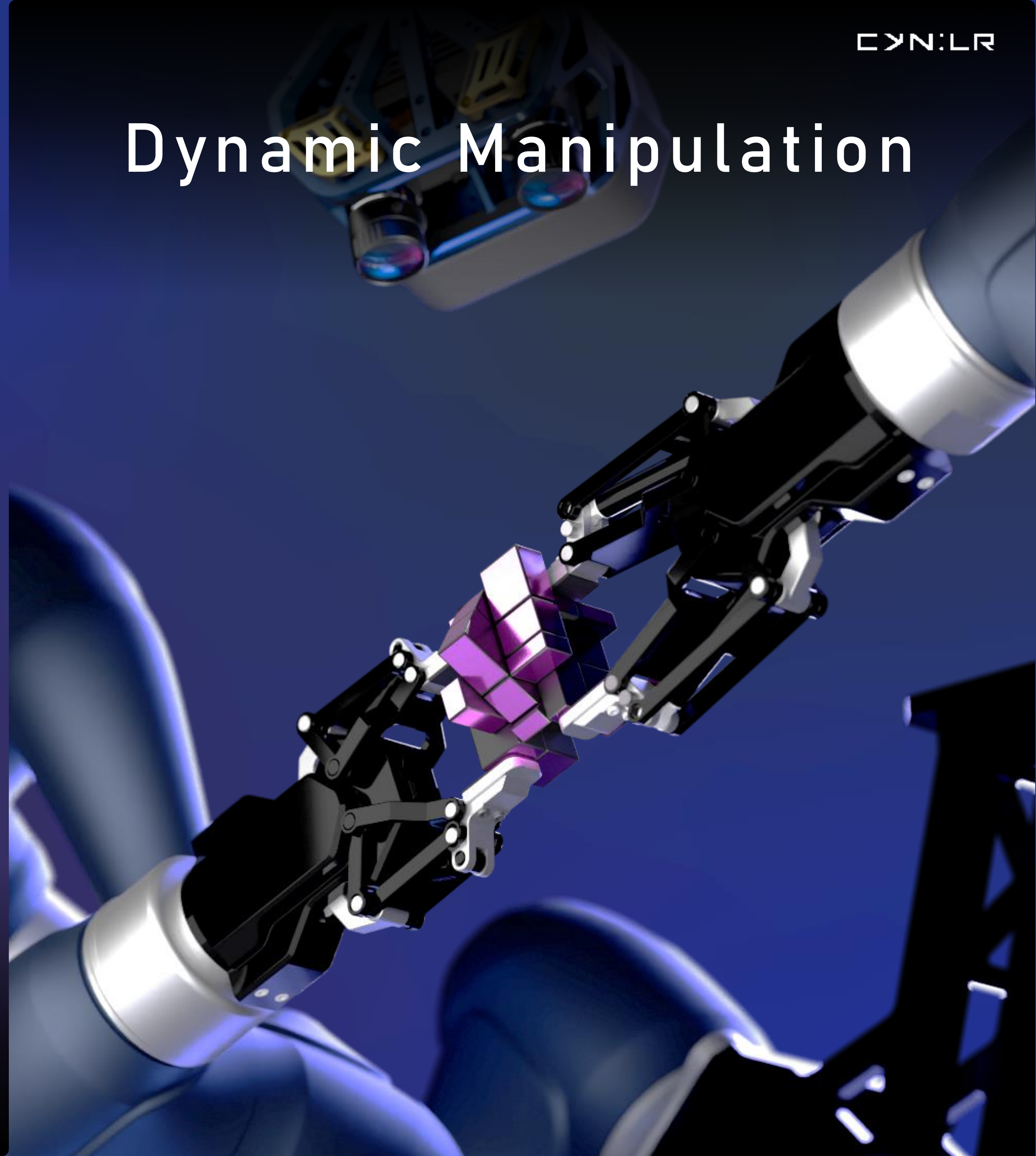
Training Free Grasp





Intuitive Vision

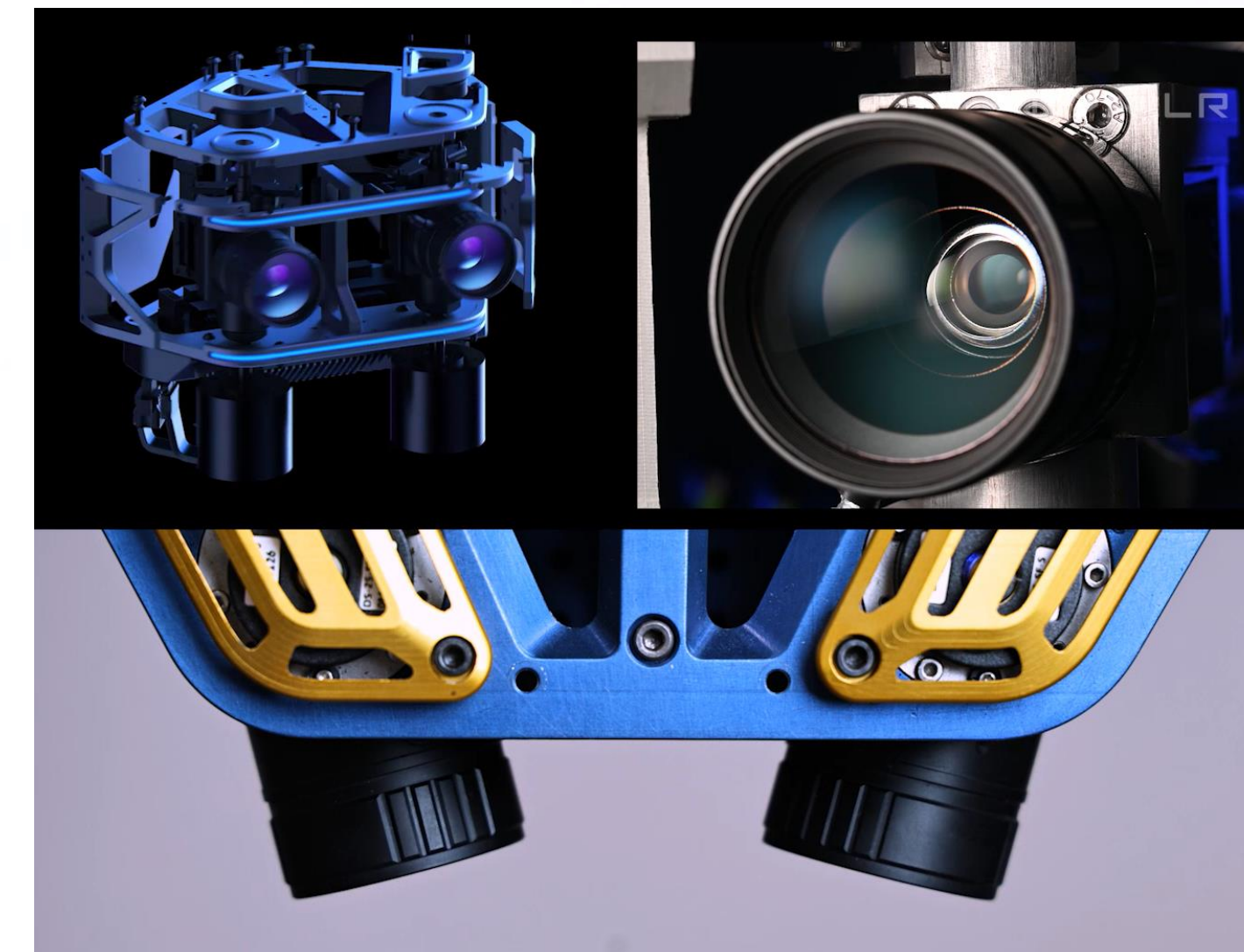
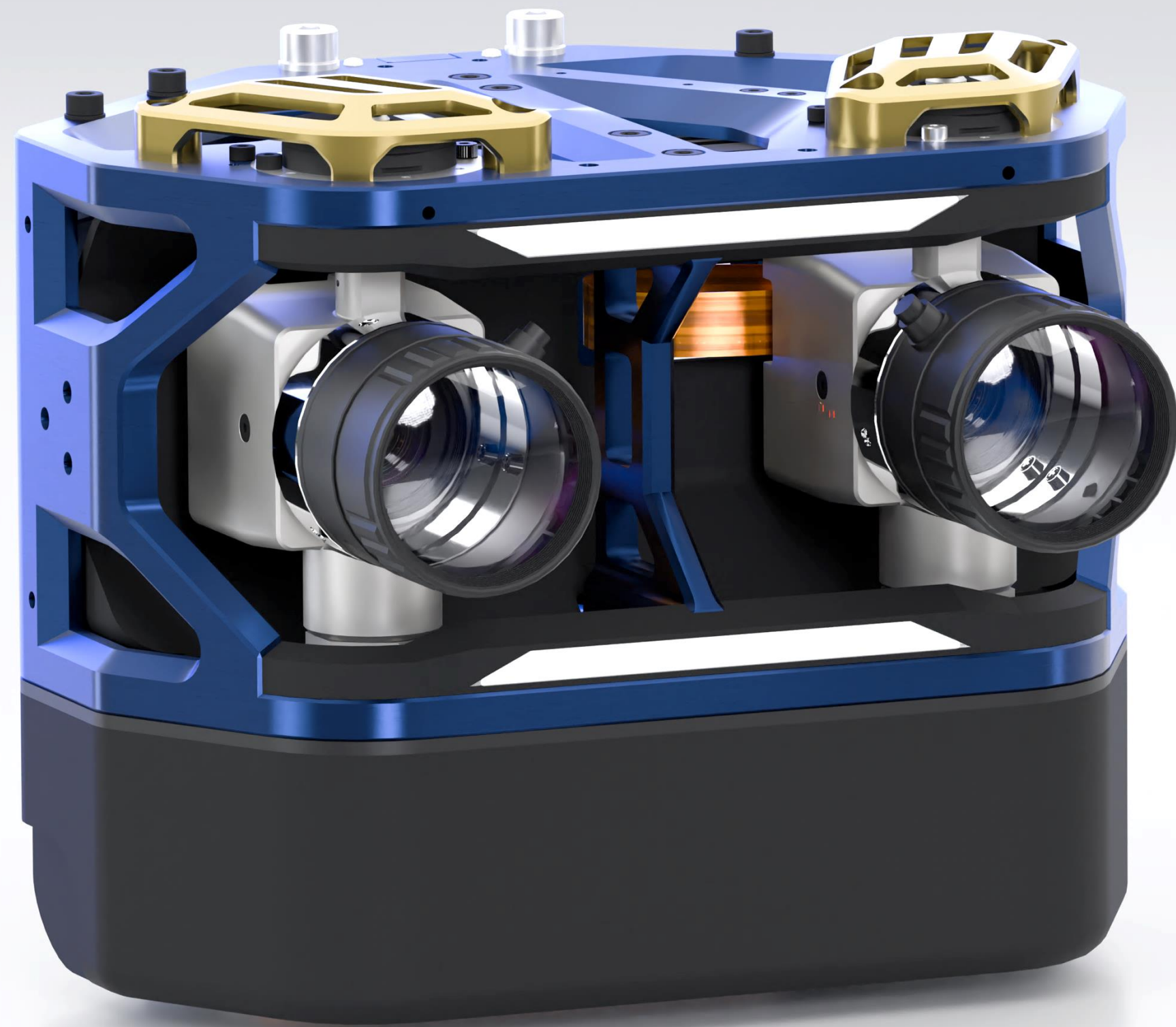
Dynamic Manipulation

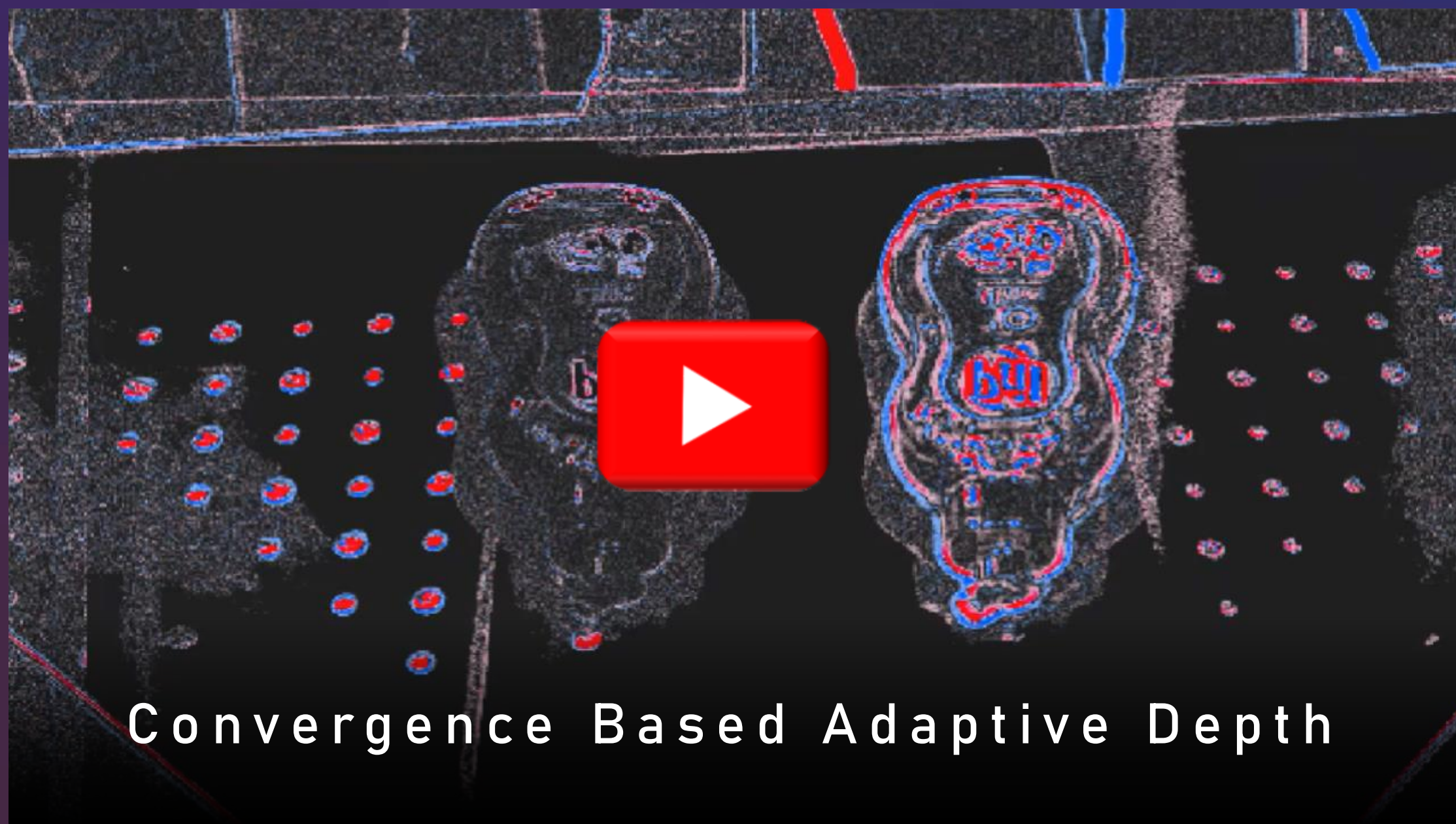
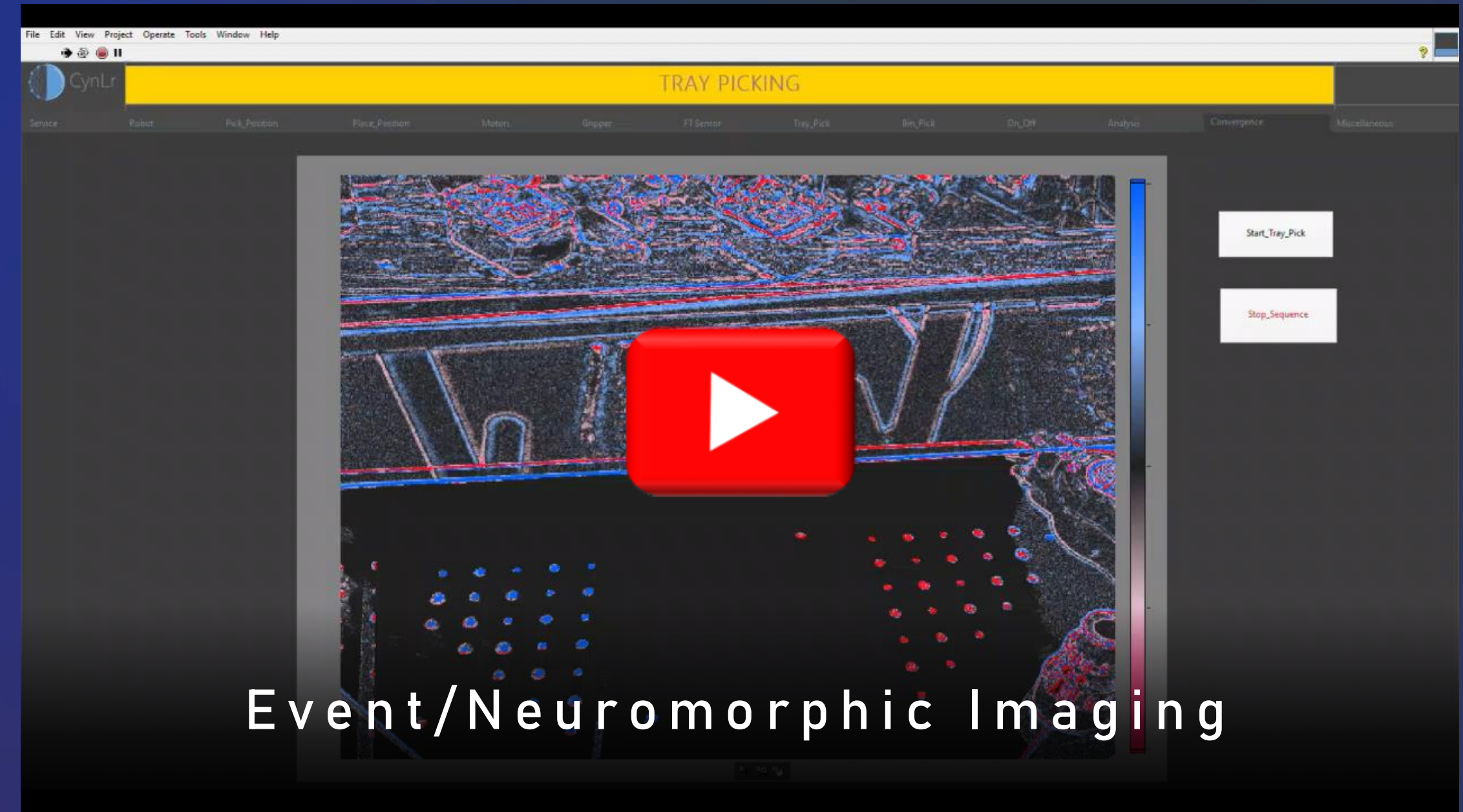
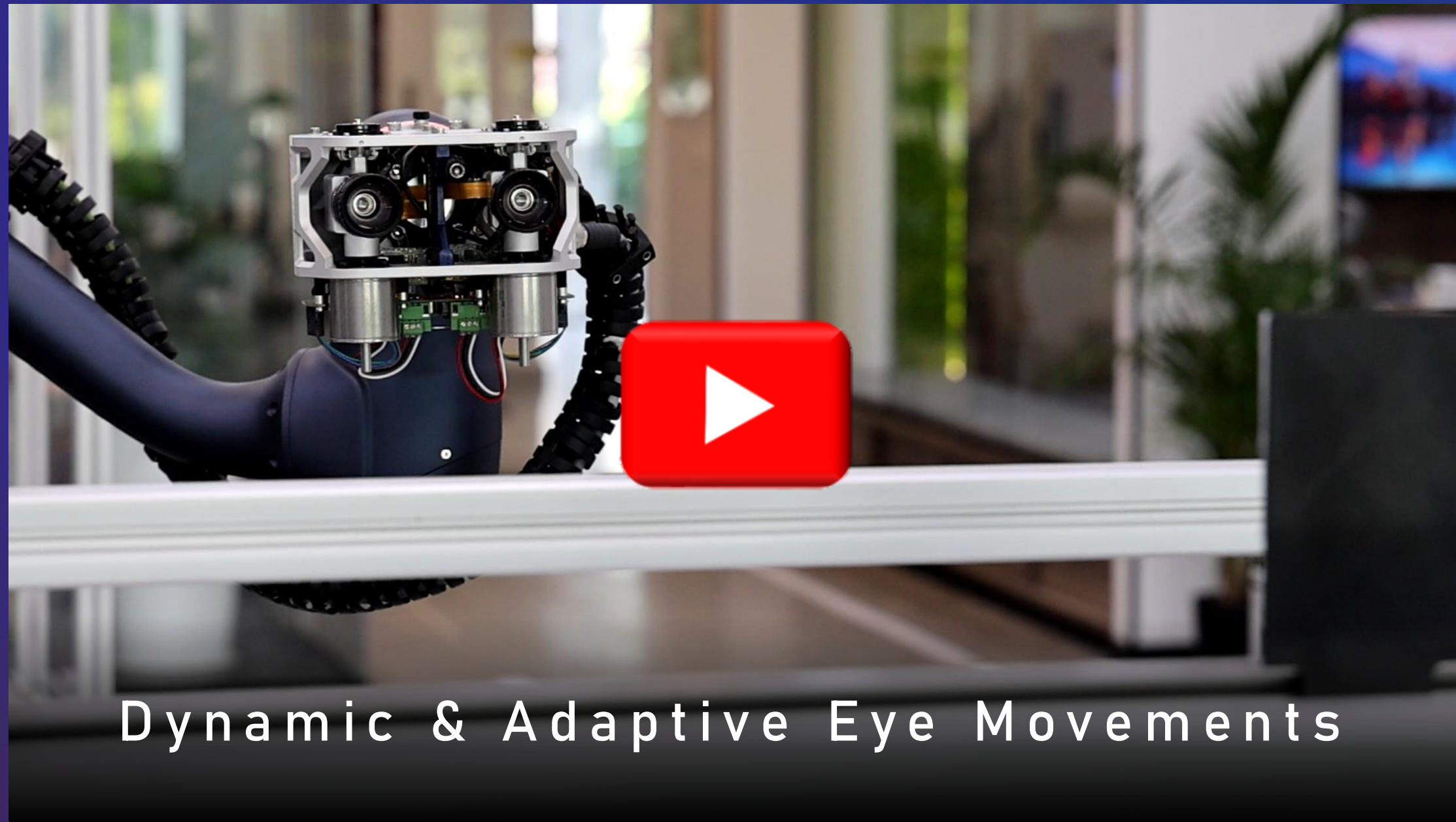


CyRo is Powered by  
**CLX VISION STACK**

An **Object-Intuitive** Vision AI HW-SW Stack

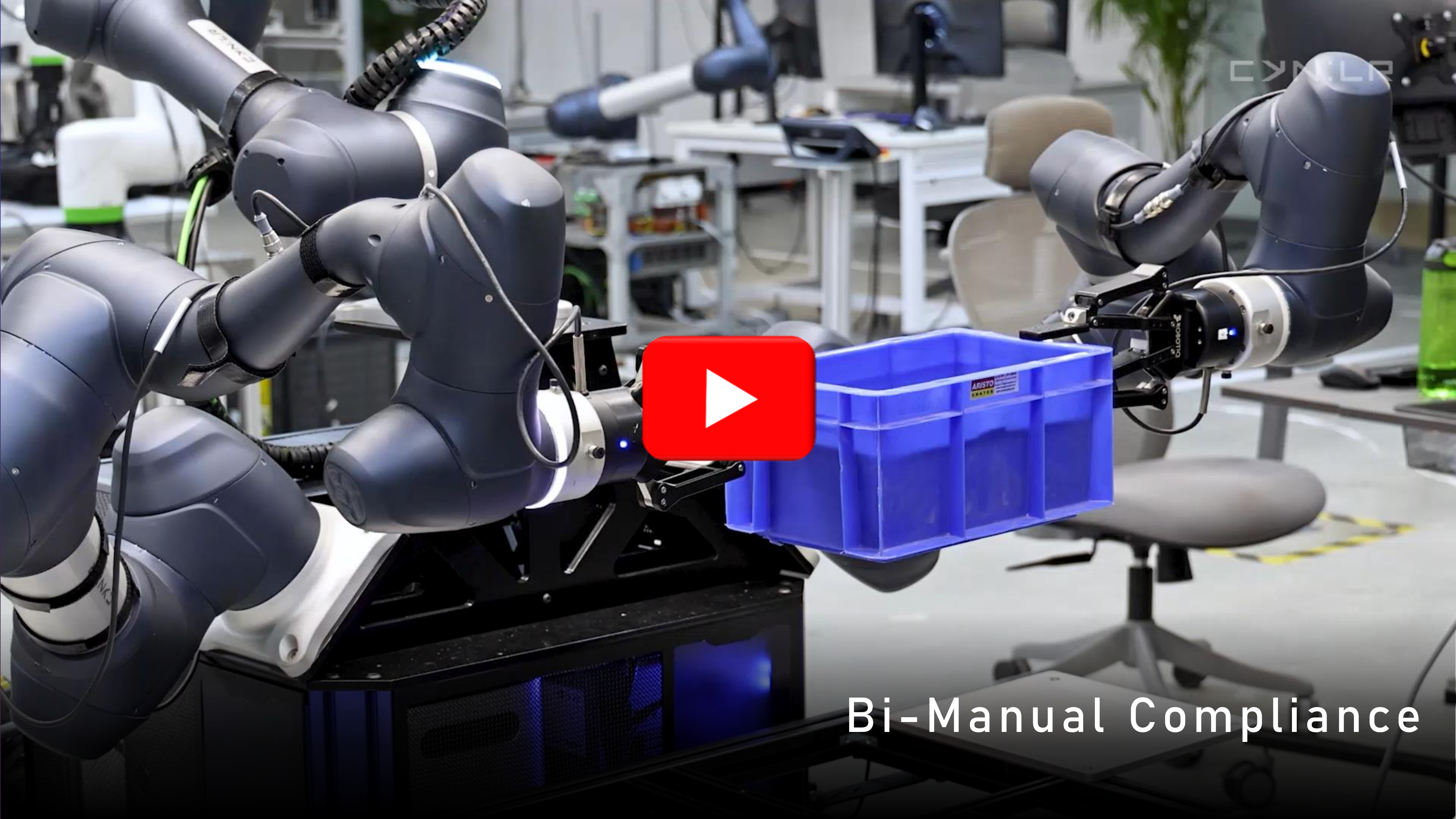
The CLX Camera designed and manufactured by CynLr is the first robotic vision system in the market to have **“Accommodation of the Eye”** – the ability to change its angle of viewing and focus to accommodate objects at any distance for depth perception







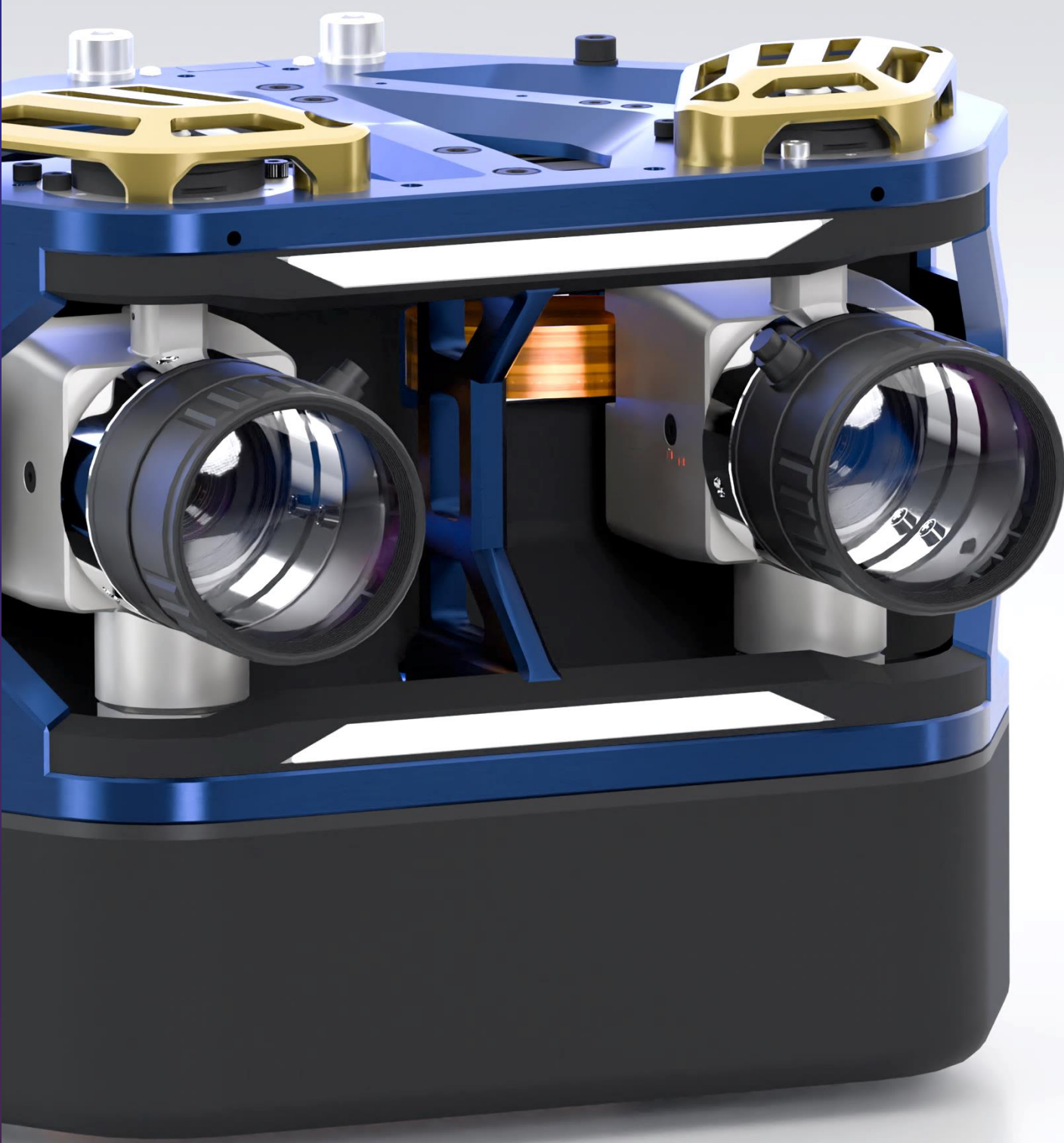
Adaptable Grasp Capabilities



CYNLE



Bi-Manual Compliance

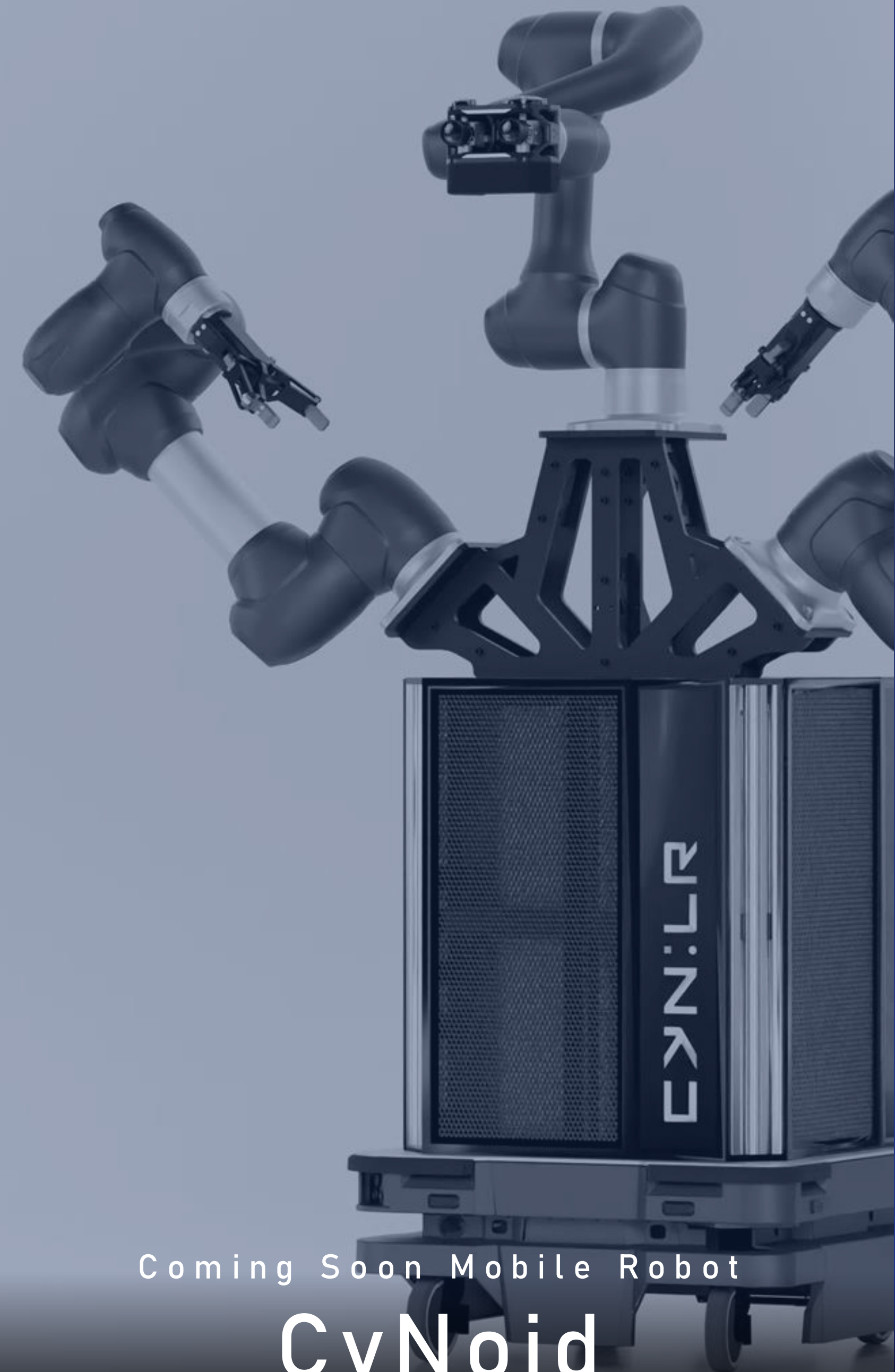


CLX-01

In Pilots



CyRo



Coming Soon Mobile Robot

CyNoid



Factory Use-Cases



Warehouse Usecases  
Use-Cases



Imagine a single factory manufacturing multiple products using standardised, generalised, and reprogrammable robots...

[nikhil@cynlr.com](mailto:nikhil@cynlr.com)





Startup Pitch

---

Ye Wang

Founder

 **EverCurrent**

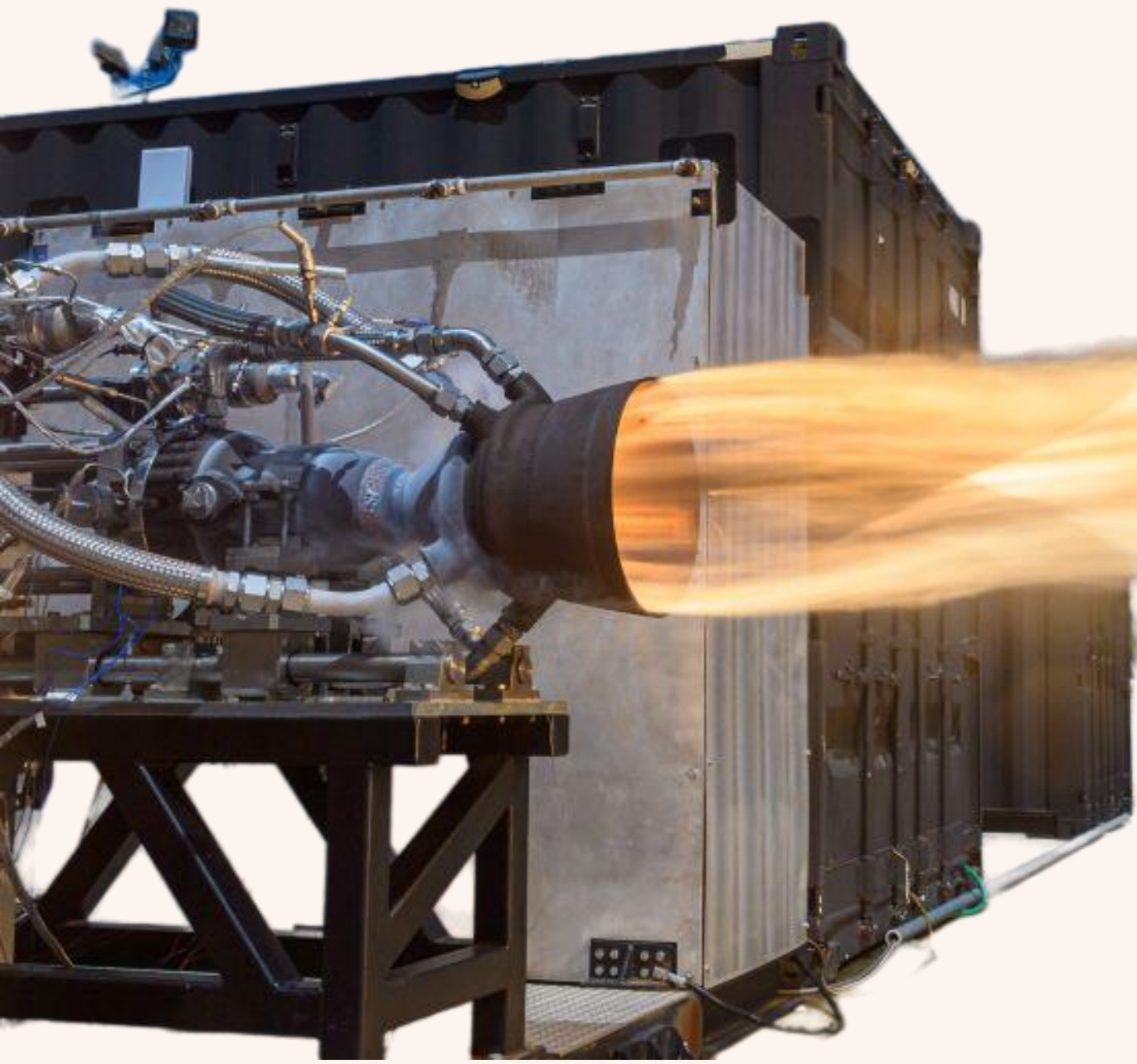
[#PNPTCSiliconValley](#)

[Join us at pnptc.com](#)





AI-native platform to align **tools,**  
**processes and knowledge**





# Smarter, More Complex, **Harder** to Build


A photograph of a car show booth for BYD. The large, illuminated BYD logo is at the top. Below it, several cars are on display, including a white SUV and a blue sedan. People are seen walking through the booth. The scene is lit with dramatic spotlights.

BYD

Competition  
Develops **2X** Fast












**Fragmented Tools  
Siloed Knowledge  
→ 50%+ Overhead**

Sorry — wrong depo  
I'm sorry — I'm not a  
centric marketing.”




# Replace Human Middleware with AI Middleware



### Team Integrations

 Slack	Not connected
 Google Drive	Not connected
 Jira	✓ Connected
 Onshape	✓ Connected
 Confluence	✓ Connected

### Personal Integrations

 Gmail	Not connected
 Microsoft Teams	Not connected
 Google Calendar	✓ Connected

1. AI Integration into  
Fragmented Tools:  
CAD, MES, Slack,  
Email, Drive, Task  
Management... Cutting  
Cost and Friction

**Design Microversions**  
View and compare microversions of your Onshape design documents

**Smart AI Laptop** 8/20/2025


**Latest Onshape Diffs — Smart AI Laptop**  
Owner: EverCurrent Assistant Created: 8/20/2025, 5:32:40 PM Updated: 8/20/2025, 5:32:40 PM

Part Studio: Entire Design Attach to Meeting


**Current Changes Comparison**  
Previous: Framework Laptop 13 CAD parts :: Undo : 1 step | Current: Automatic update

Previous Microversion	Current Microversion
Automatic update abd315cc2435665e5ca7b5ad	Automatic update abd315cc2435665e5ca7b5ad
Automatic update 25c01d8ccab20f023ea501ab	Automatic update 25c01d8ccab20f023ea501ab
Framework Laptop 13 CAD parts :: Insert feature : Delete part 1 5d6e1f763997b7bcdcb34130	Framework Laptop 13 CAD parts :: Insert feature : Delete part 1 5d6e1f763997b7bcdcb34130
Framework Laptop 13 CAD parts :: Undo : 1 step c5af9a2a97fdd90c372d832f	Framework Laptop 13 CAD parts :: Undo : 1 step c5af9a2a97fdd90c372d832f


**Previous Version**



**Current Version**



2. Immediate  
Time to Value:  
Time to  
Documentation,  
Reporting,  
Change...

 The project is in danger

✈ EverCurrent

# 3. Unlock Tribal Knowledge to Accelerate Development with Confidence and Quality

June July August

EVT

Build part in-house with PETG in Austin, TX2.

Order part from Top Gear Workshop

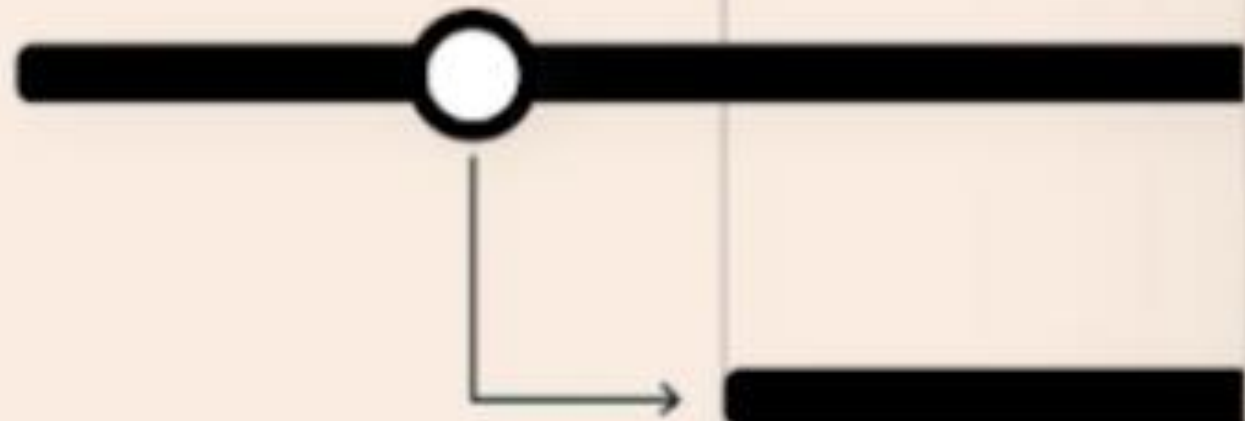
Remove UL Battery Test from Milestone 3

! The project is in danger

EverCurrent

June July August

EVT



EverCurrent



## 15% likelihood of slippage

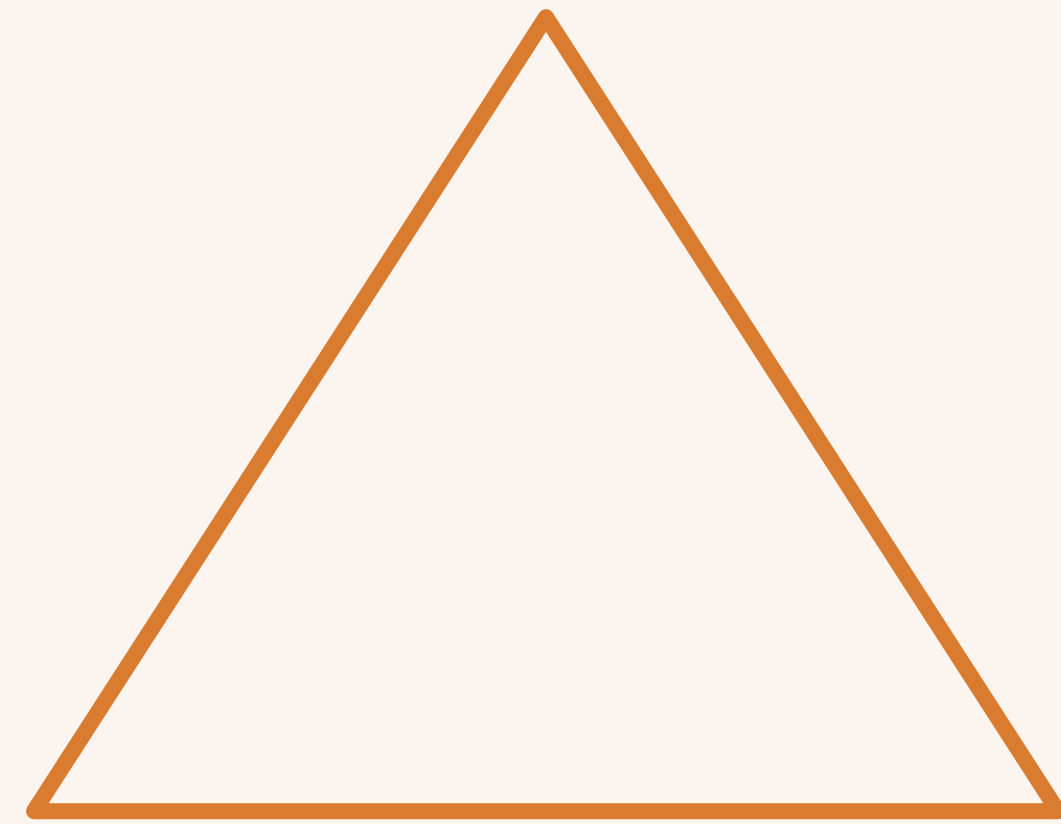
### Root Cause:

Supplier > Index Manufacturing

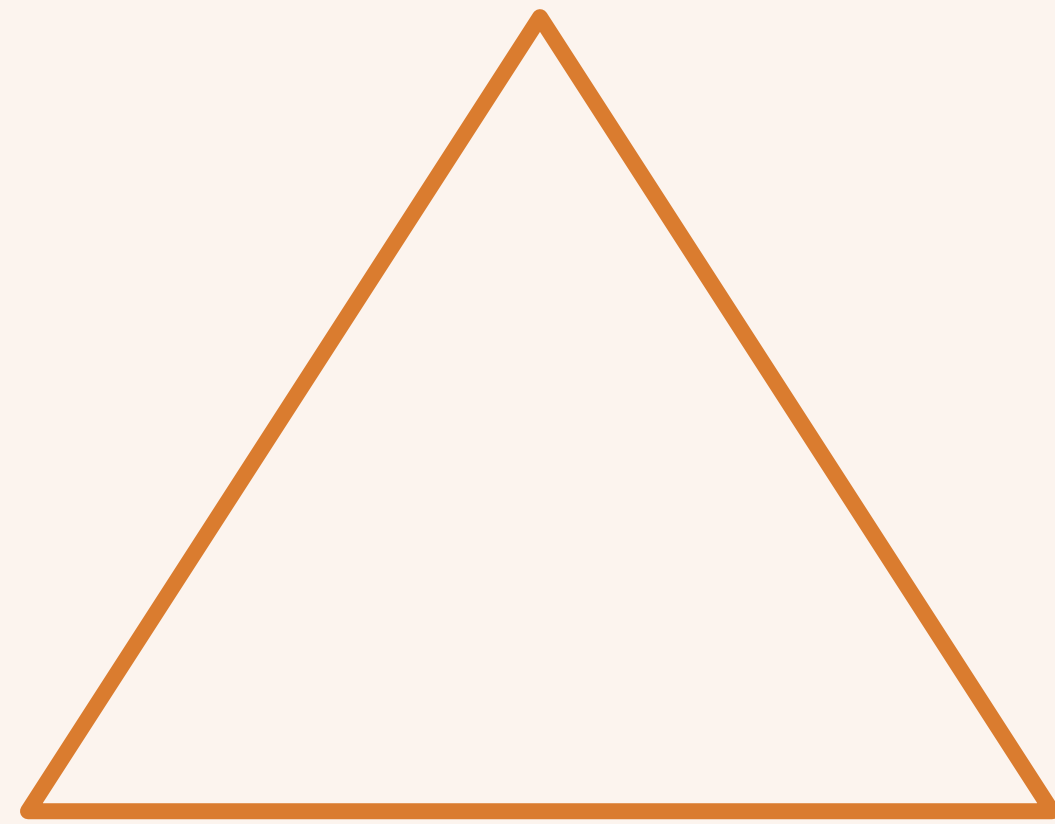
Based on previous orders, Index Manufacturing has a 2-week shipping time for packages over 5kg, no shipping notification has been received for **Top Piston - SLA Job** needed to complete Milestone 2.

### Remedies

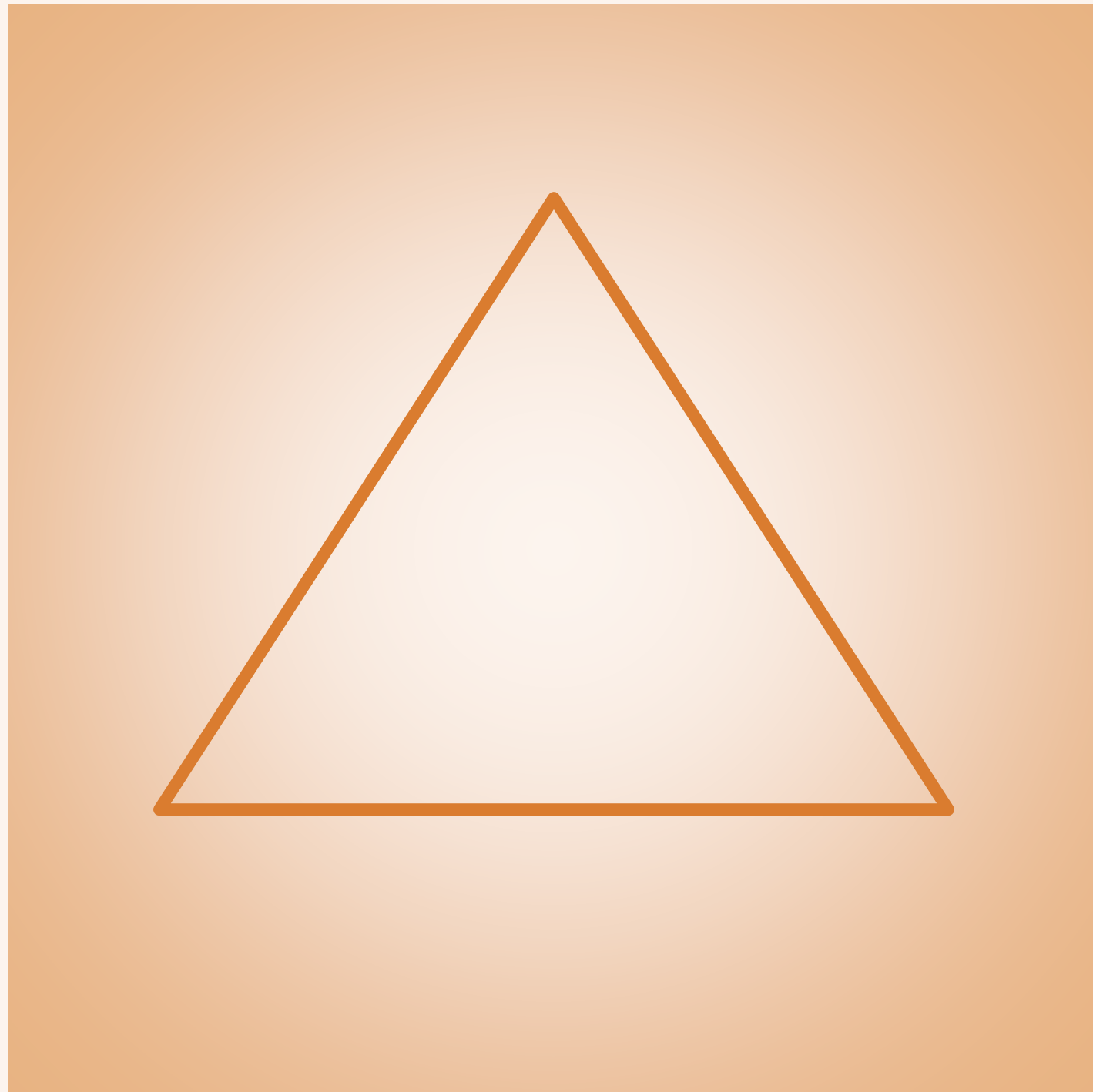
- Build part in-house with PETG in Austin, TX2.
- Order part from Top Gear Workshop
- Remove UL Battery Test from Milestone 3



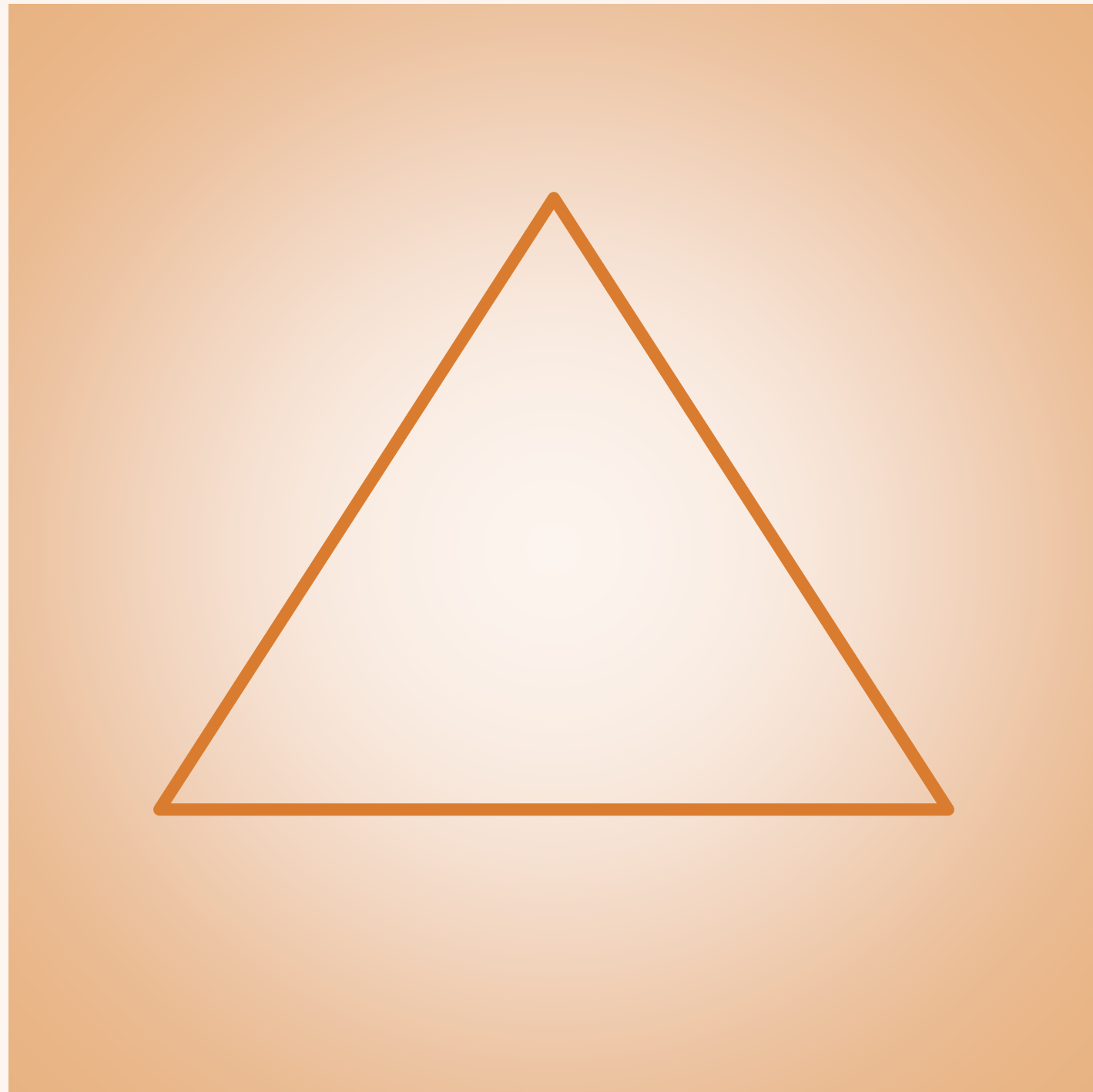
Change is good!



evercurrent **deltas**

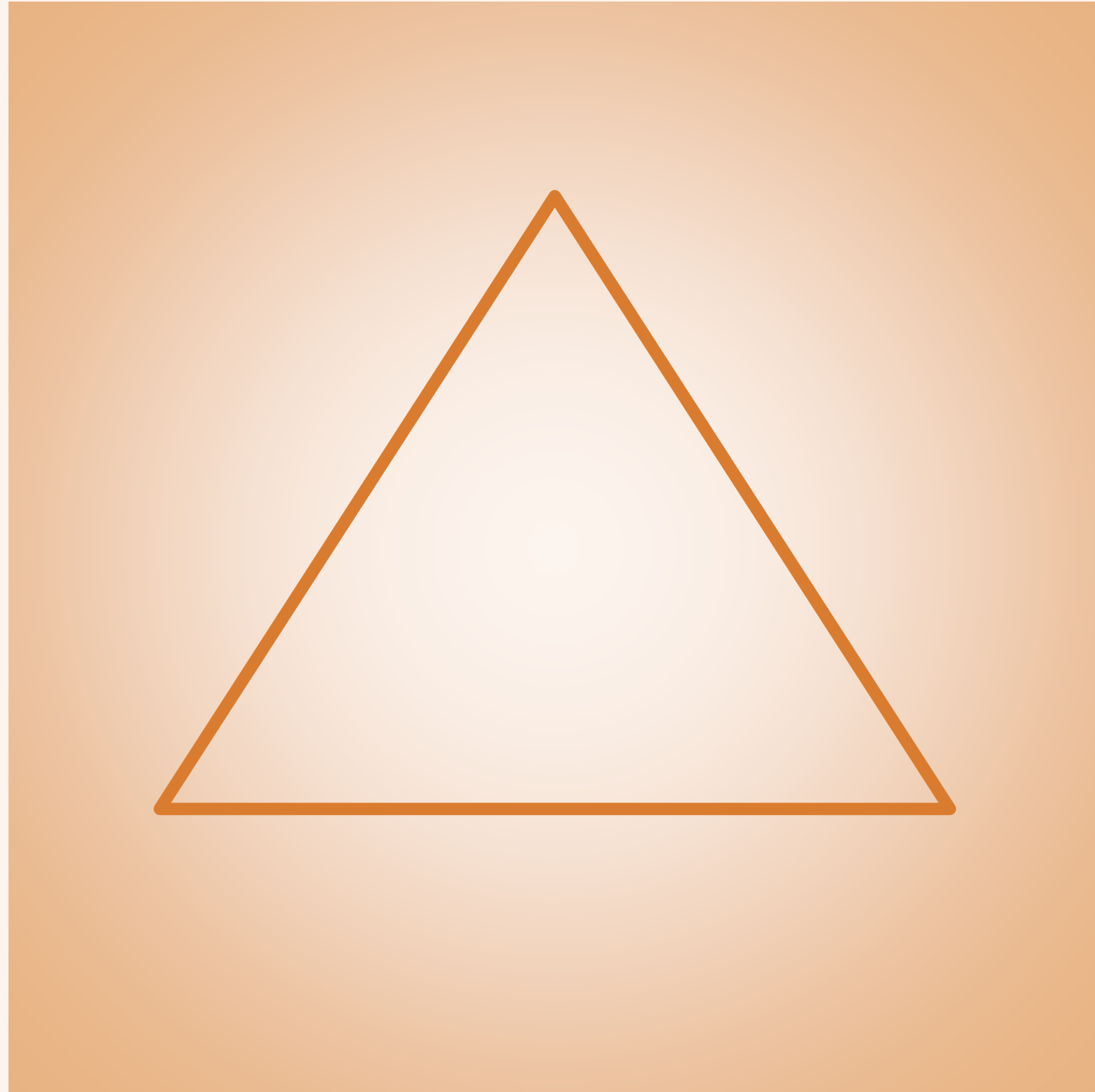


evercurrent context  
around the deltas



context switch cost  
pm cost  
ramp up time  
response time  
risk





capacity  
innovation  
quality  
confidence  
revenue





## Ye Wang, CEO

Co-founder of Join  
Sr. Principal Research Scientist at Autodesk  
Principal Engineer at Onshape  
MIT, IOI



## Advisors

Co-founder of Onshape  
former CEO of Autodesk  
former EVP of Strategy at SolidWorks



 **ye-wang-sf**

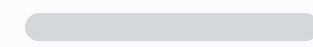
 **ye@evercurrent.ai**

 **EverCurrent**

Home for your **tribal knowledge**  
Accelerate time to **change,**  
**decision, market...**



Startup Pitch



Glen Balliet

Co-Founder



#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)



---

# GLEN BALLIET

Founder + CEO  
Null Autos

## Engineering Fellow at **CARIAD**

Led cloud and backend for software defined vehicles

## Principal Engineer + Director at **Rivian**

Built + scaled factory software from 1k → 100k vehicles in 30 months

## Principal Engineer + VP at **American Express**

Every card swipe relies on my code in production, twice



# THE WIDENING GAP



Traditional OEMs

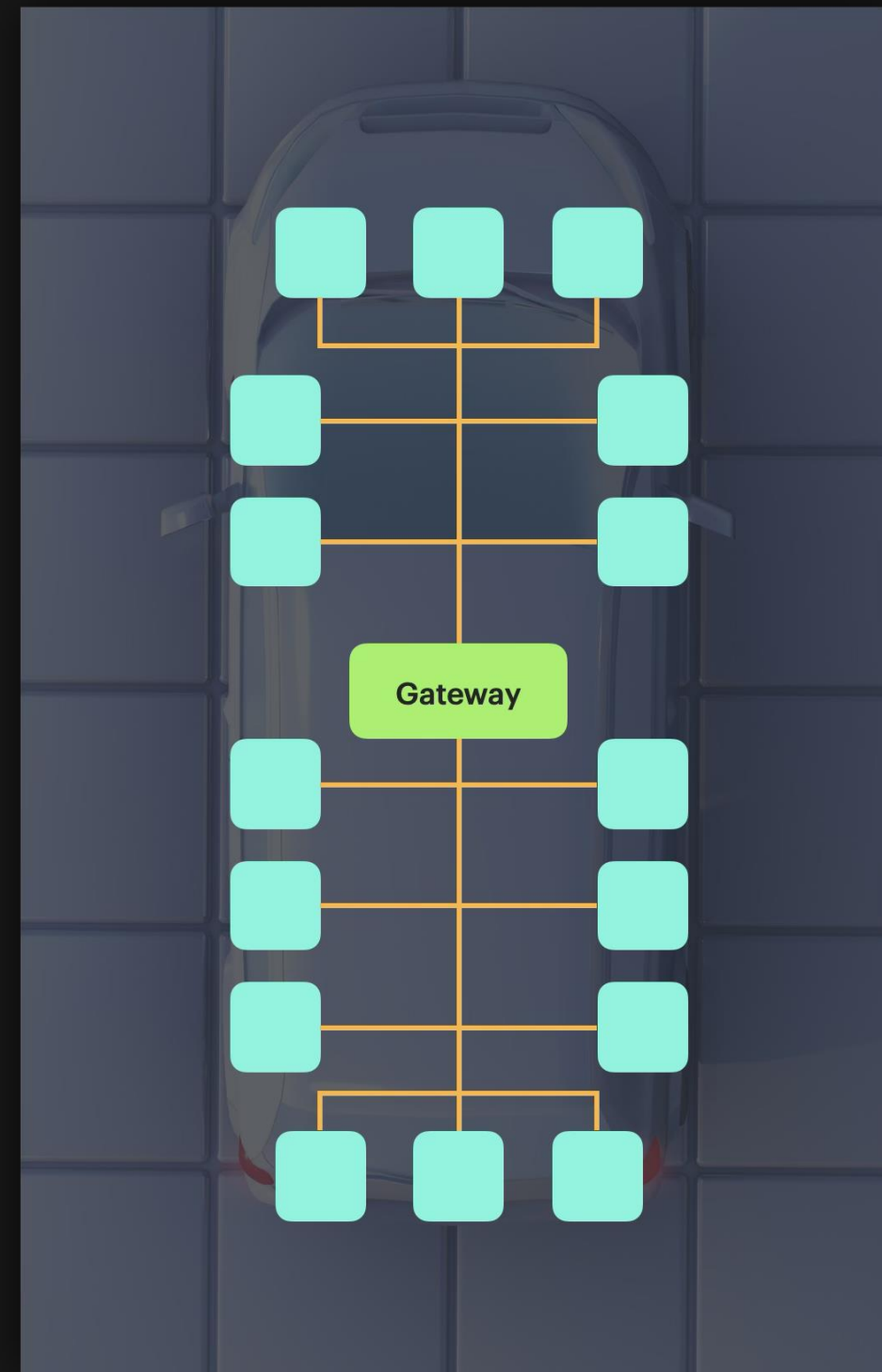


Software First

R&D Spend Per Vehicle	\$1,032	\$2,984
Wiring Harness Length	4 KM	0.7 KM
ECUs	125	22
Annual OTA Updates	2	18

Sources: Rivian, Tesla, BYD public disclosures; Ford, Toyota, GM, VW annual reports (2022 - 2024)

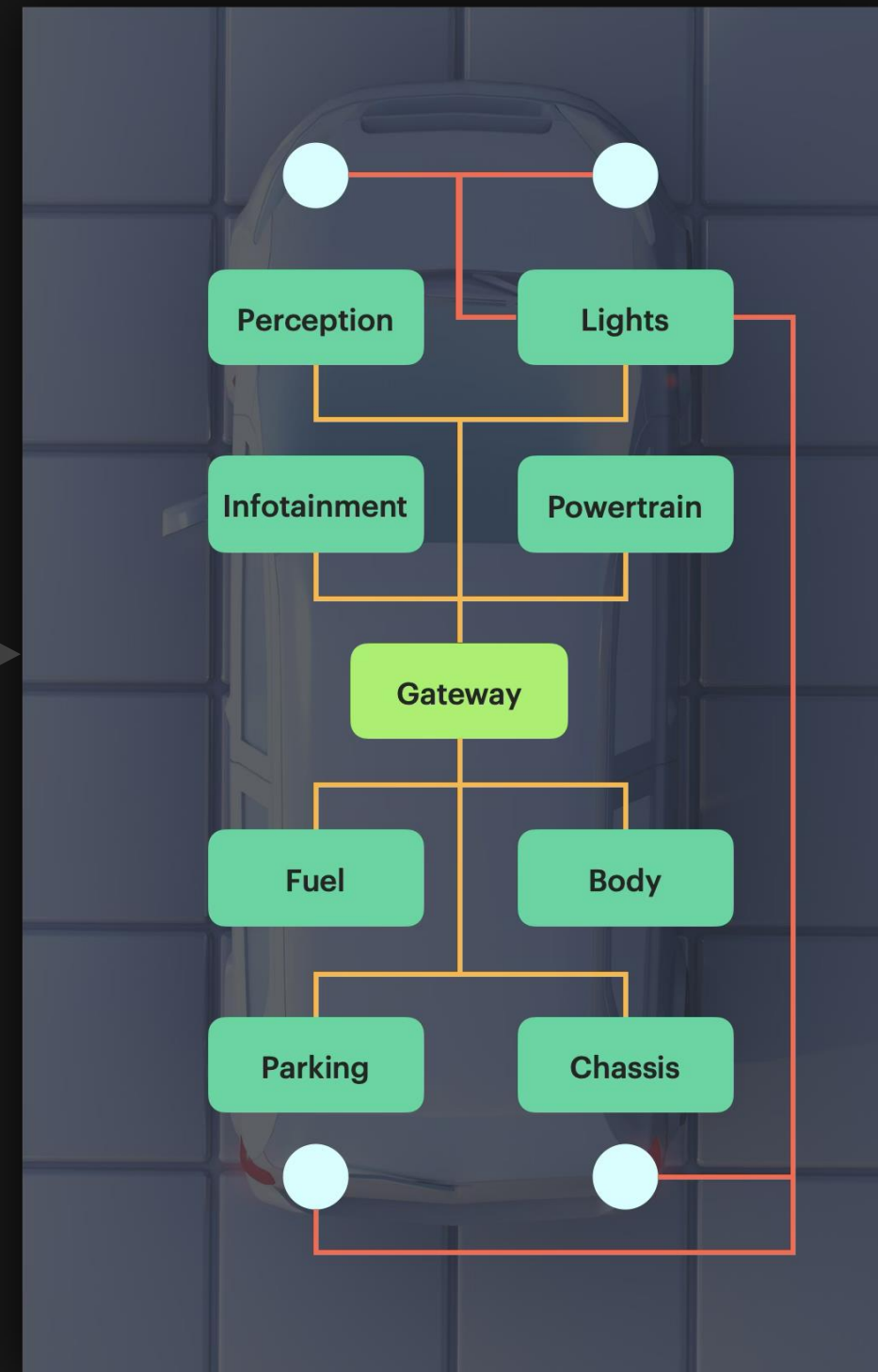
# ARCHITECTURE MAKES ALL THE DIFFERENCE



Distributed Architecture

1990 - 2015

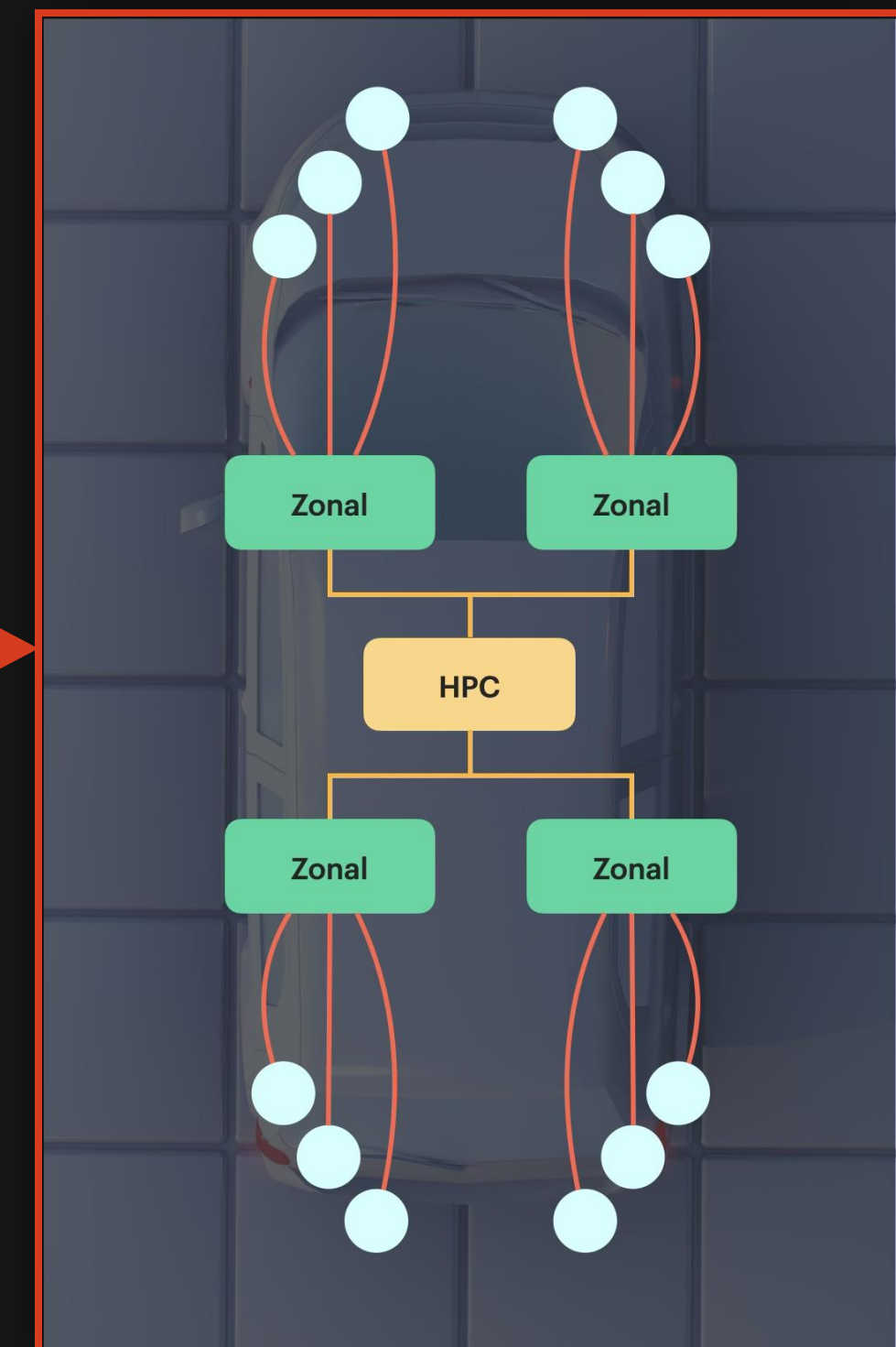
100+ ECUs



Domain Architecture

2015 - 2025

50+ ECUs



Zonal Architecture

2020 - 2030

5-25 ECUs

---

WE CLOSE THAT  
GAP IN TWO YEARS  
WHILE REDUCING  
PER-VEHICLE

Our end-to-end software platform works on **any vehicle hardware**, eliminating silos and complexity. This unified approach reduces integration costs and gives developers a single toolchain for the entire vehicle.

**COSTS.**

# WE'VE ALREADY STARTED

**OEM Pilot**

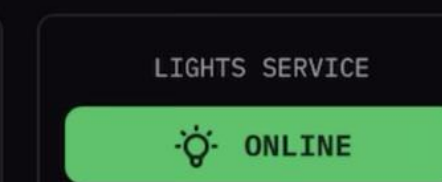
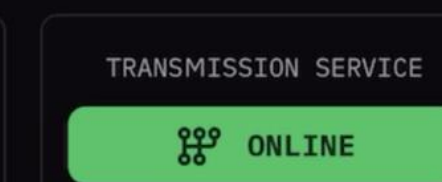
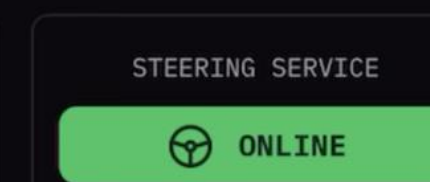
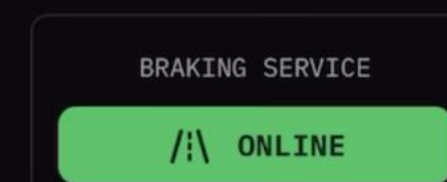
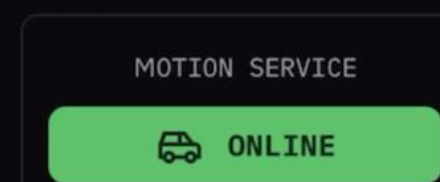
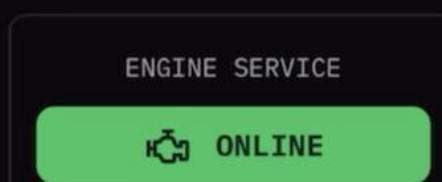
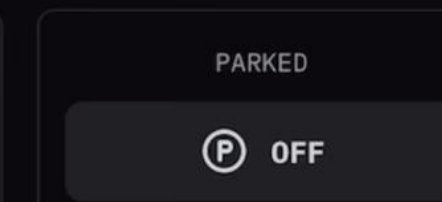
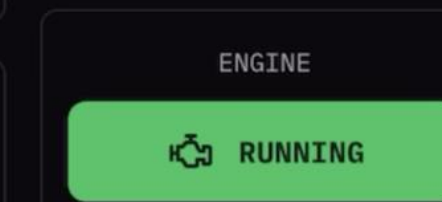
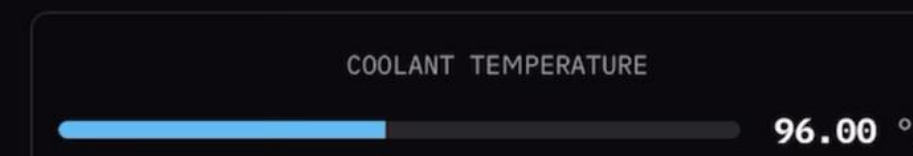
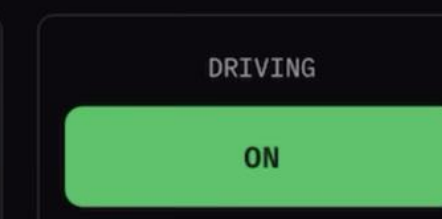
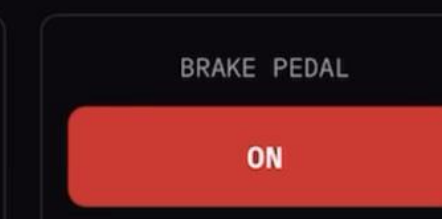
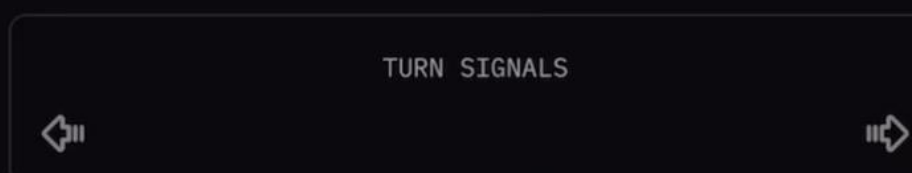
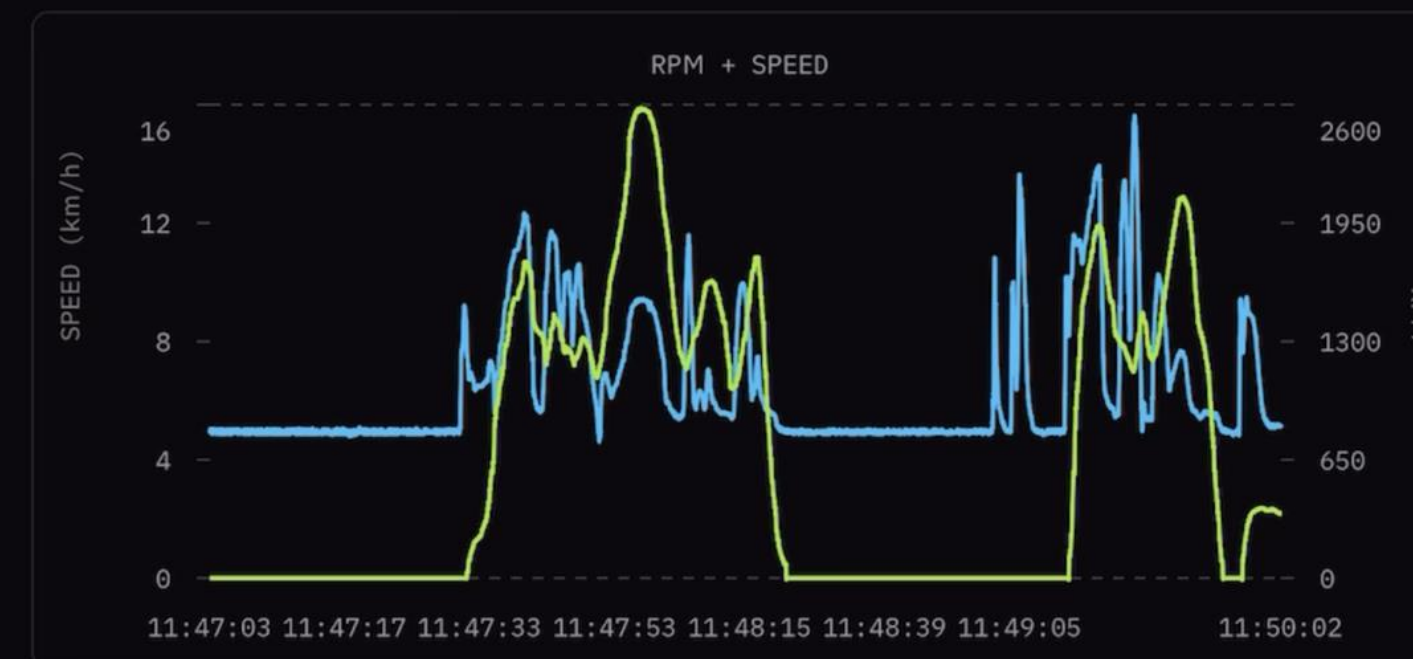
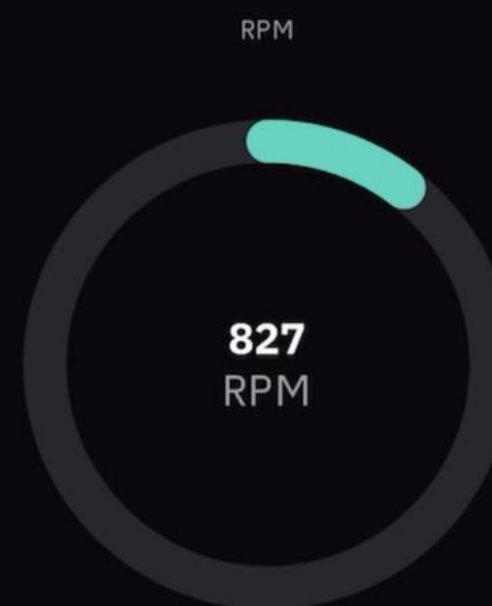
**20 Vehicle Models**

**World Class Team**

**Industry Partnerships**

## VEHICLE TELEMETRY

11:50:02



**hello@null.autos**

PLUGANDPLAY

Sv summit

AWARD AWARD AWARD AWARD

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

PLUGANDPLAY

Sv summit

MOBILITY & PHYSICAL AI

AWARD



#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)



KEYNOTE SPEAKER

---

Dirk Schulte

R&D Director, Advanced Engineering & Product Platforms



#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)



# Next-Gen In-Car Experiences: Valeo Racer's Immersive AR Gaming

**Dr.-Ing. Dirk SCHULTE**

Valeo Brain Division NA  
R&D Director, Advanced Engineering



VALEO  
SAFE INSIGHT



SMA 04

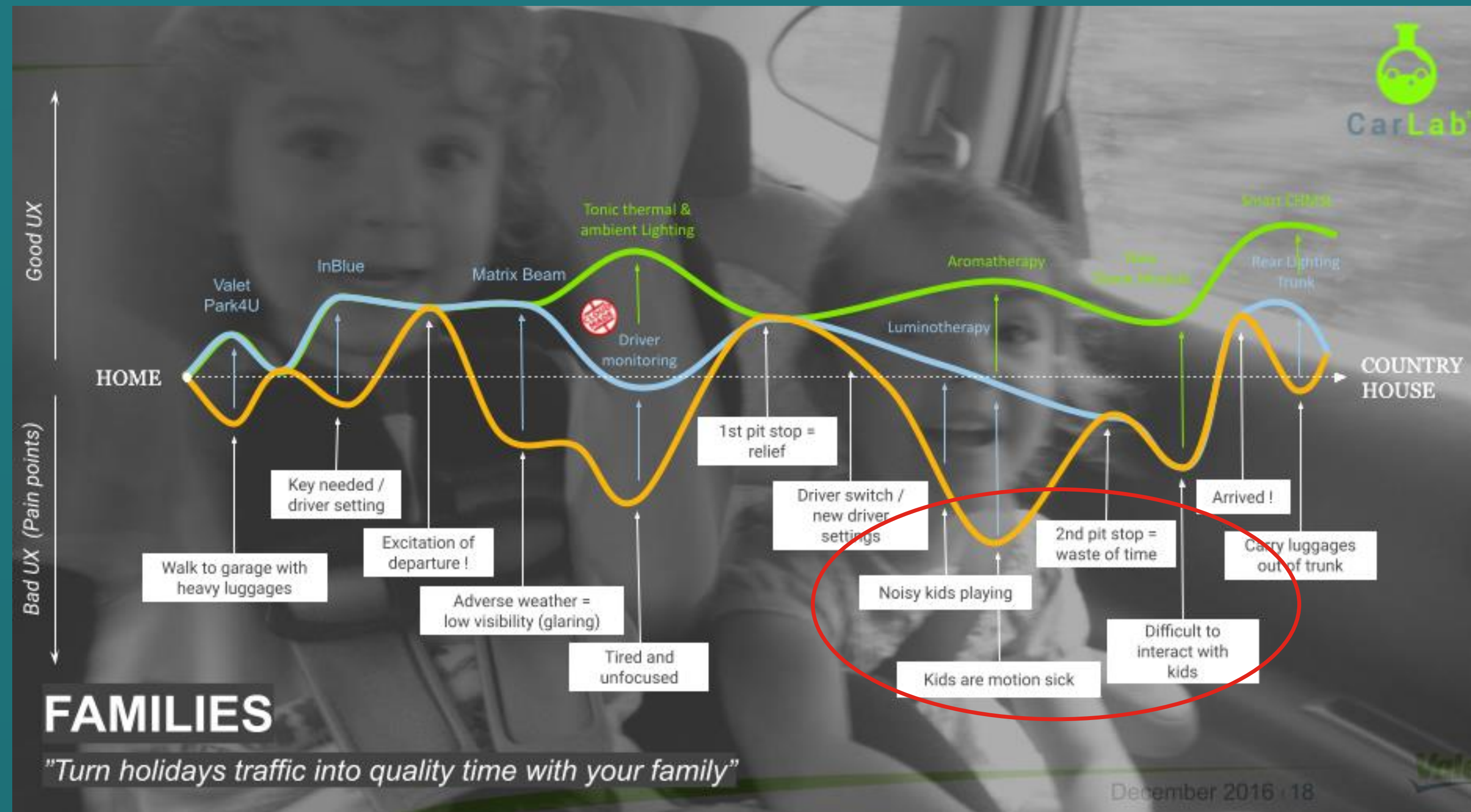
**Valeo**

**Valeo**

# “FAMILY HOLIDAY ROAD TRIP” PAIN POINTS

On long car trips, children in the backseat can quickly become **BORED**, leading to irritability, fighting, and ultimately, distracting the driver.

Are books, movies or games the solution?



# INFOTAINMENT BASED IN-CAR VIDEO AND GAMING

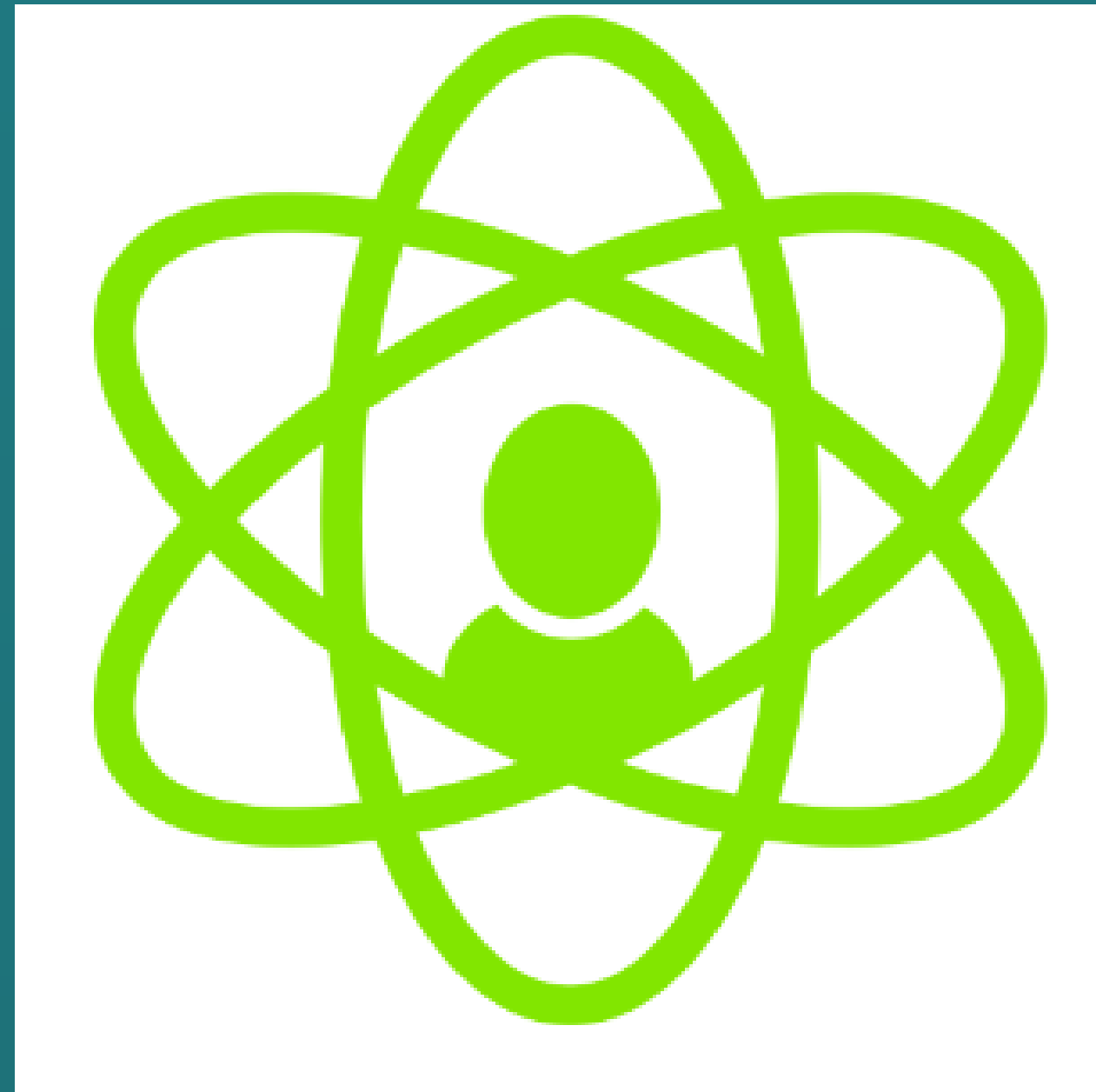
- Audi Immersive In-Car Entertainment (CES 2019) - entertainment via streaming while the vehicle is stationary
- AFEELA panoramic front screen and dedicated rear seat displays with a spatial audio system, allowing individual entertainment for all occupants
- Tesla Arcade: library of games accessible on the car's display; some titles can be played against other drivers at Supercharger stations
- AirConsole platform allows occupants to play a variety of games on the car's main display using their smartphones as controller (BMW, Mini, VW)
- Android Auto OS allows for direct installation of apps, including games, from the Google Play Store (Ford, Polestar)
- XREAL's PanoCinema app provides movies and games integrated with the vehicle, using their AR glasses (CES 2024, Nio ES8)



Entertainment for Every Passenger



Most of the in-car entertainment can only be used in a standing vehicle, or is disconnected from the vehicle movement and can lead to **MOTION DISCOMFORT**.



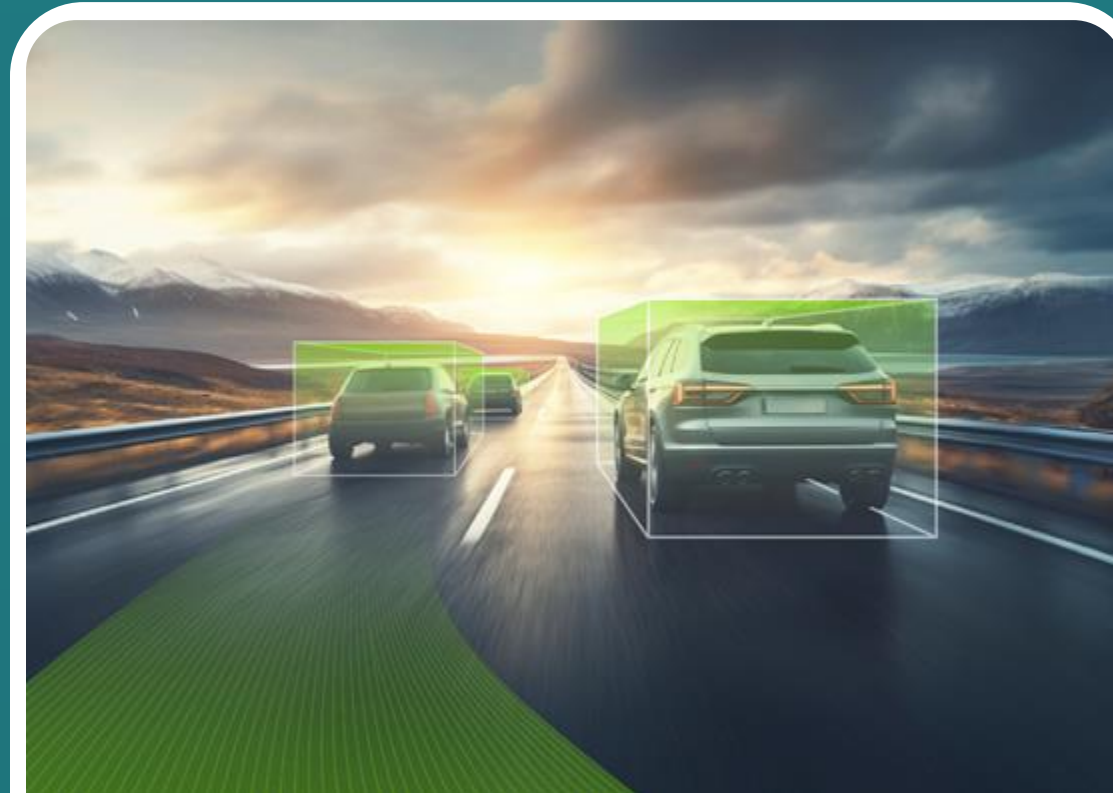
**Leveraging Valeo's  
AI-based ADAS and AR  
expertise to provide  
new in-car experiences  
to passengers**

# **SDV\* : A PARADIGM SHIFT IN AUTOMOTIVE DESIGN,** WHERE SOFTWARE BECOMES THE CORE OF VEHICLE FUNCTIONALITY.



## **Beyond Mechanics**

Shift from hardware to software-  
centric developments



## **Safety and Automation**

Algorithms and AI  
for safer and pleasant mobility



## **Personalized Experience**

Adapting to user preferences  
and needs



## **Continuous Evolution**

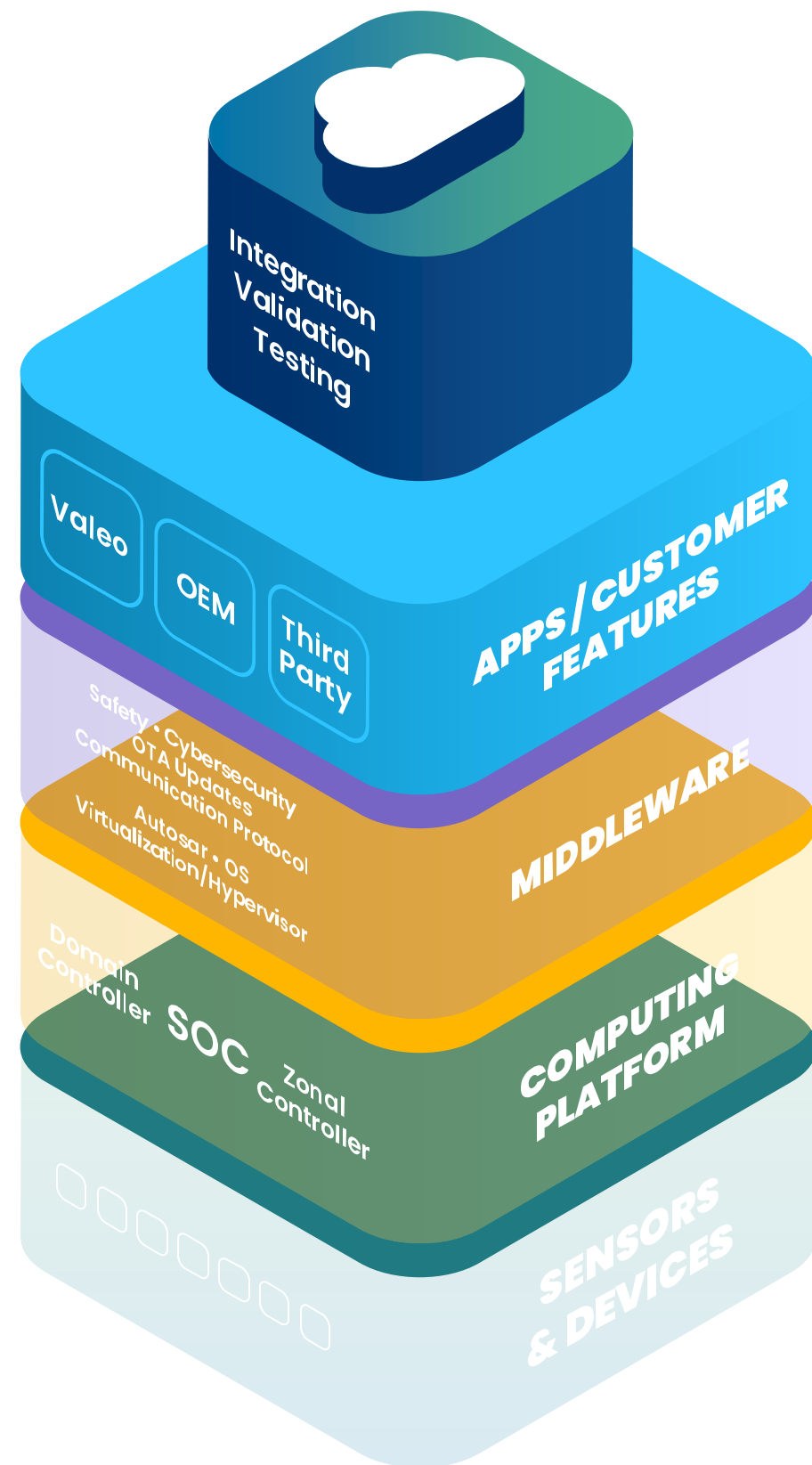
Software updates for new features  
and post purchase improvements

# **VALEO IS AT THE HEART OF THE SDV TRANSFORMATION**

\* SDV = Software Defined Vehicle



# SOFTWARE DEFINED VEHICLES ARE DESIGNED DIFFERENTLY AND OPEN NEW OPPORTUNITIES



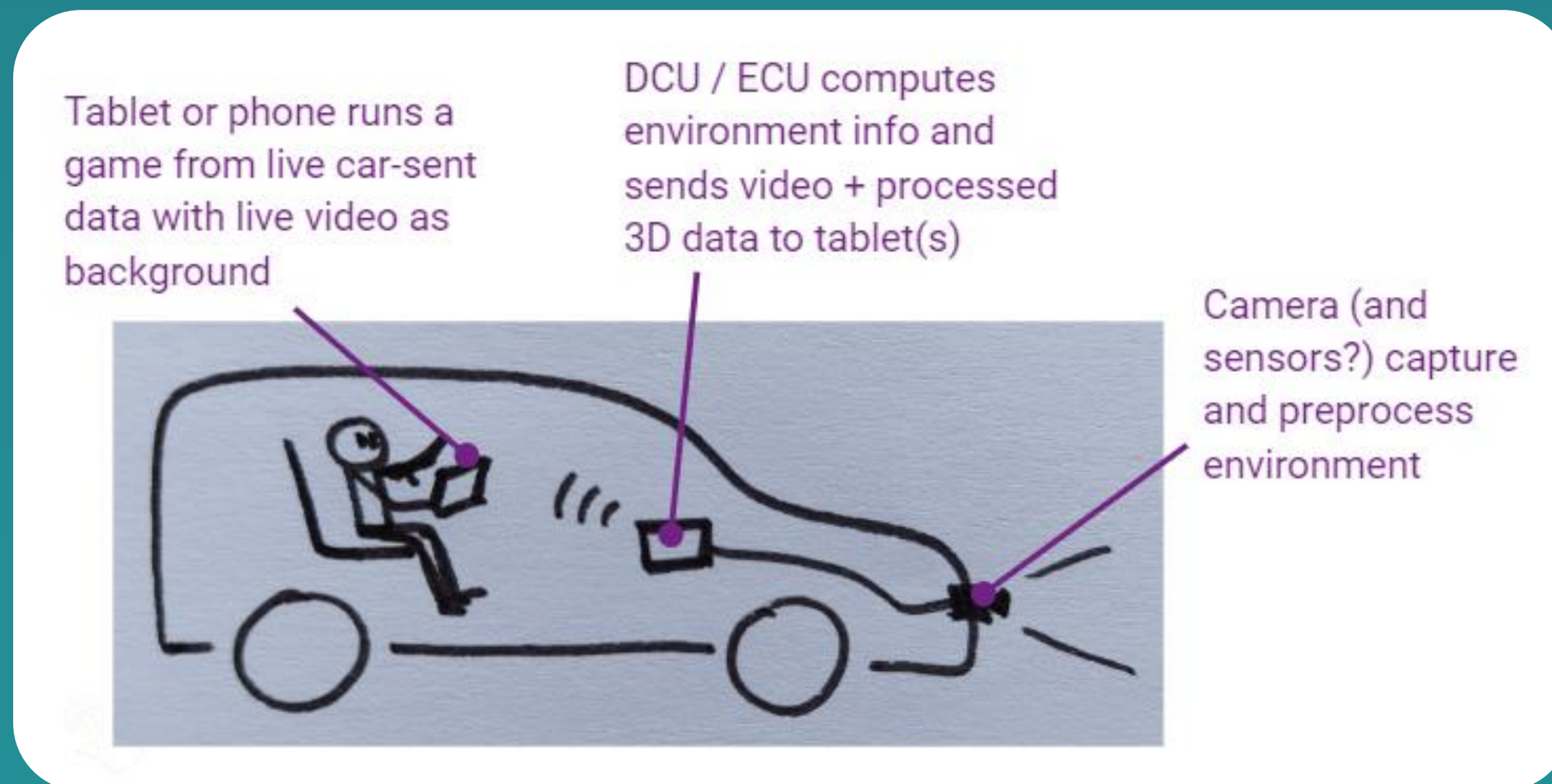
<b>SERVICES</b>	ENGINEERING SERVICES		DIGITAL SERVICES TO END USERS			
	SW INTEGRATION, TESTING & VALIDATION	MAINTENANCE AS A SERVICE	L4 PARKING SOLUTIONS	IMMERSIVE CONNECTION ON THE MOVE		
<b>SOFTWARE</b> <i>Valeo anSWer</i>	AD LEVEL 3-4 STACK	ADAS LEVEL 1 TO 2+ STACK	PARKING AUTOMATION STACK			
	DRIVER MONITORING SYSTEMS	HANDS-OFF DETECTION	DATA FUSION	AR GAMING		
	COMPUTER VISION & PERCEPTION	ARTIFICIAL INTELLIGENCE		OS & MIDDLEWARE		
	<b>COMPUTING UNITS</b>	VSS360	ADAS + IVI CONTROLLER	DOMAIN CONTROLLER	CENTRAL COMPUTER	ZONE CONTROLLER
<b>DRIVING AUTOMATION SENSORS</b>	CAMERAS		LiDARS		RADARS	ULTRASONICS
	DRIVER MONITORING SYSTEMS	HEAD-UP DISPLAY	PHONE-AS-A-KEY	INTERIOR EXPERIENCE DEVICES		
<b>INTERIOR EXPERIENCE DEVICES</b>	STEERING WHEEL HUB	DISPLAYS	5G TELEMATIC UNIT			

# CRAFTING OUR FIRST PROTOTYPE

- Tested Multiple Camera Locations
- Front Surround View Parking Camera Captures the Environment
- Video Streamed from Vehicle to Smartphone/Tablet via WiFi
- AR “Game Engine” Generated Virtual Objects Based on the Context
- Player Controls their Avatar to Collect Items and Avoid Obstacles



ADAS Front camera + radar blindspot (environment information)



# VEHICLES AS AN XR PLATFORM

Using ADAS Sensors and Algorithms to Power XR in Motion

Environment Understanding

## Sensing



Surround Perception and Video Stream(s)



CAN Data



Road Signs

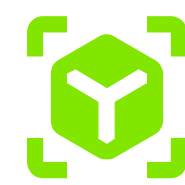


Data Processing and Merging

## ADAS Algorithms



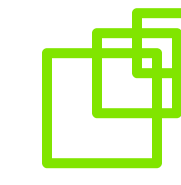
Driving Situation



Object Detection



Semantic Segmentation

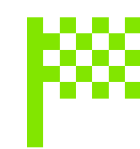


Depth



XR Application and XR Device

## XR Developers



Adaptive Gameplay



Game Environment



External APIs



User Data



User Device



# WHY FOCUS ON BYOD\* GAMING?



## Quick Go-To-Market

Widespread Mobile Devices  
Gaming for **More Vehicles** and  
**More Passengers**  
Too many specialized automotive  
IVI Platforms  
Regulations prevent Gaming on  
screens visible to the Driver



## Mobile Gaming Market

Mobile Gaming: **53% of Market**  
Valued at **\$103.5B** in 2022  
Can attract **more developers** if we  
can establish a standardized  
vehicle framework



## The Best Game Engine

Powers **40% of Games**  
**69% of Top Mobile Games**  
Automotive IVI market opens  
future opportunities for both  
Mobile and In-Vehicle Gaming

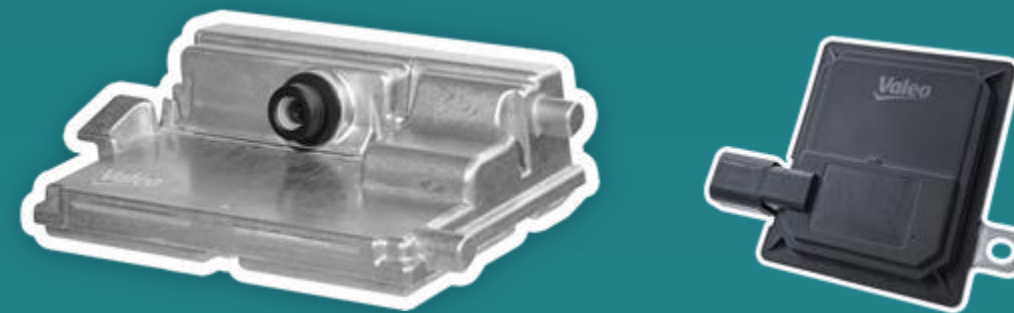
\* BYOD = Bring Your Own Device

# Valeo Racer

HOW IT WORKS

## ADAS FRONT CAMERA & CORNER RADARS

Compute environment information



## FRONT 360 PARKING CAMERA

160° video streaming for gaming



## DOMAIN ECU

Send video and processed 3D data to tablets ( WiFi)

## valeo.ai

AI-based perception algorithms, using “real world” sensors, provide data to augment reality for in-cabin experiences

## TABLETS

Runs Valeo Racer game from live car-sent data with live video as background



SCORE 14900



00150



18  
MPH



**Thank You  
for your  
Attention!**





SMART TECHNOLOGY  
FOR SMARTER MOBILITY

PLUGANDPLAY

SV SUMMIT

# LIVE STARTUP DEMOS

#PNPTCSiliconValley

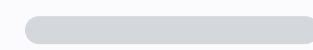
Join us at [pnptc.com](https://pnptc.com)

PLUGANDPLAY

Sv summit



Startup Demo



Mike Emory

Produce Manager



#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)



# Luminary Cloud

Building Physics AI Models To Transform Engineering



Michael Emory, PhD  
Product Manager, Luminary  
Cloud





- 01 What is Physics AI?
- 02 Demo
- 03 Luminary's Physics AI Platform
- 04 Looking Forward



# Redefining Engineering Workflows

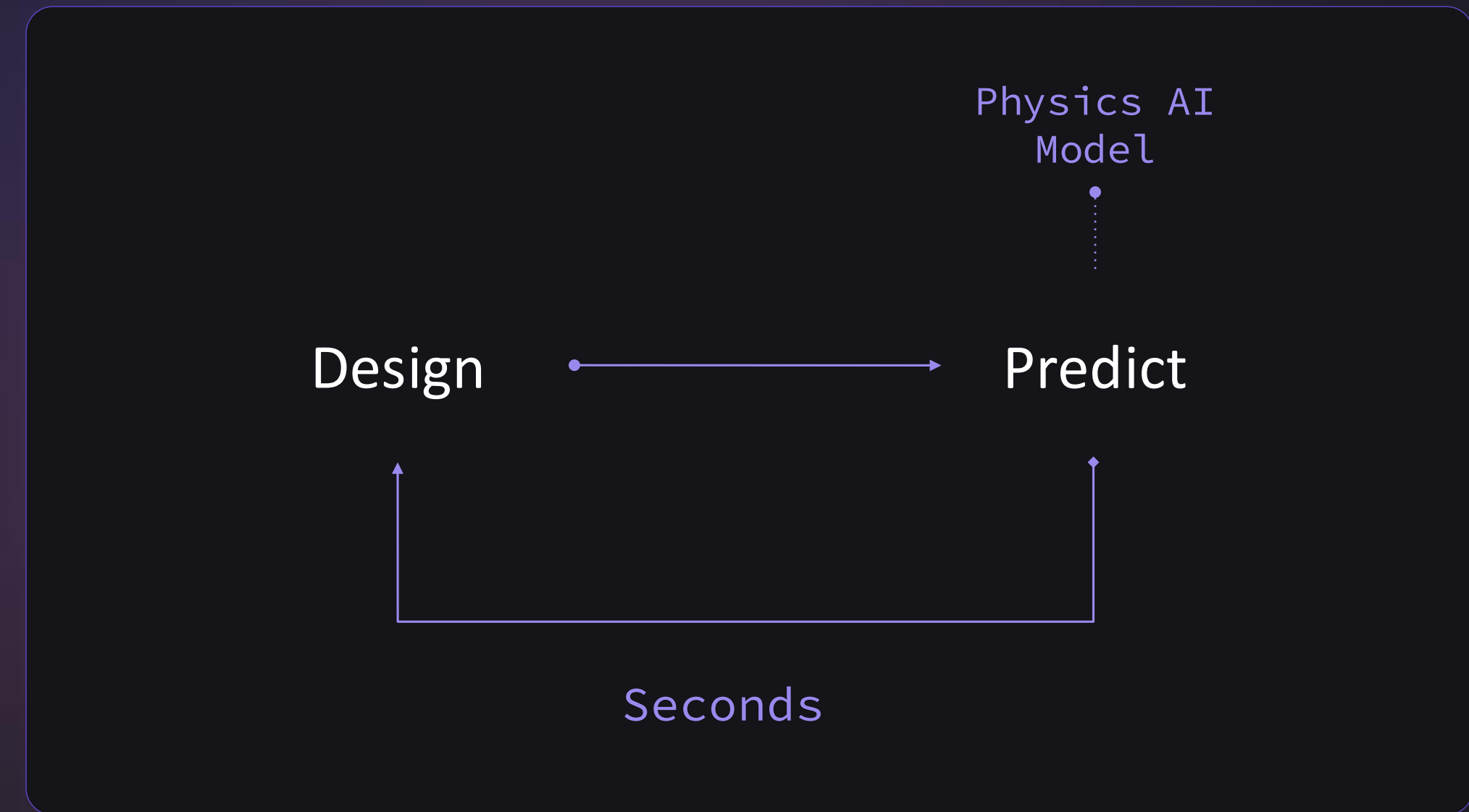
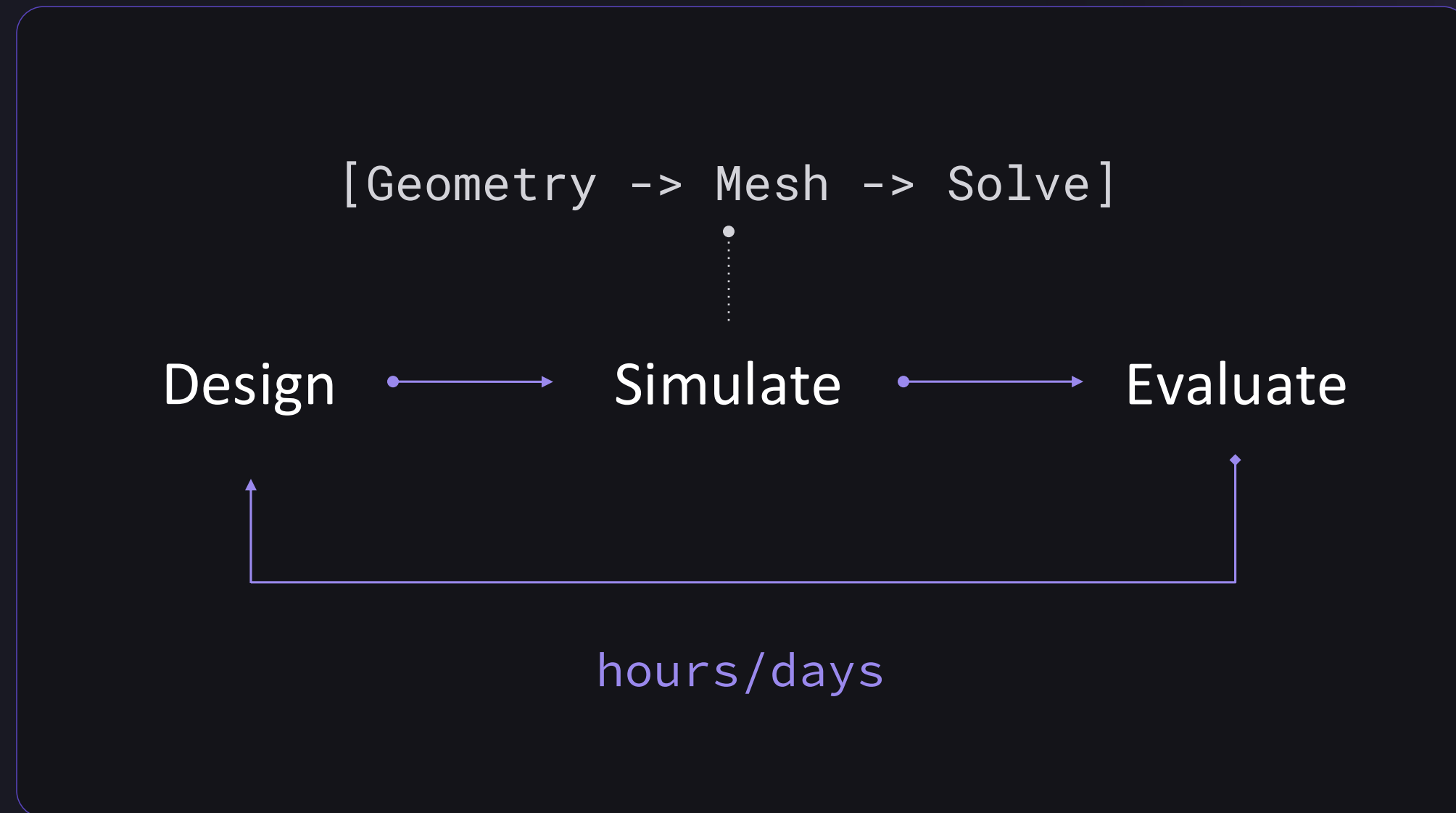
Physics AI is fundamentally different from LLMs

	LLMs/Generative AI	Physics AI
<i>Predicts</i>	Text, images, video	4D fields, physical behavior, real-world product performance
<i>Trained On</i>	Abundant internet data	Scarce physics simulation data
<i>Understands</i>	Language, concepts, patterns	Physical laws, invariants, symmetries



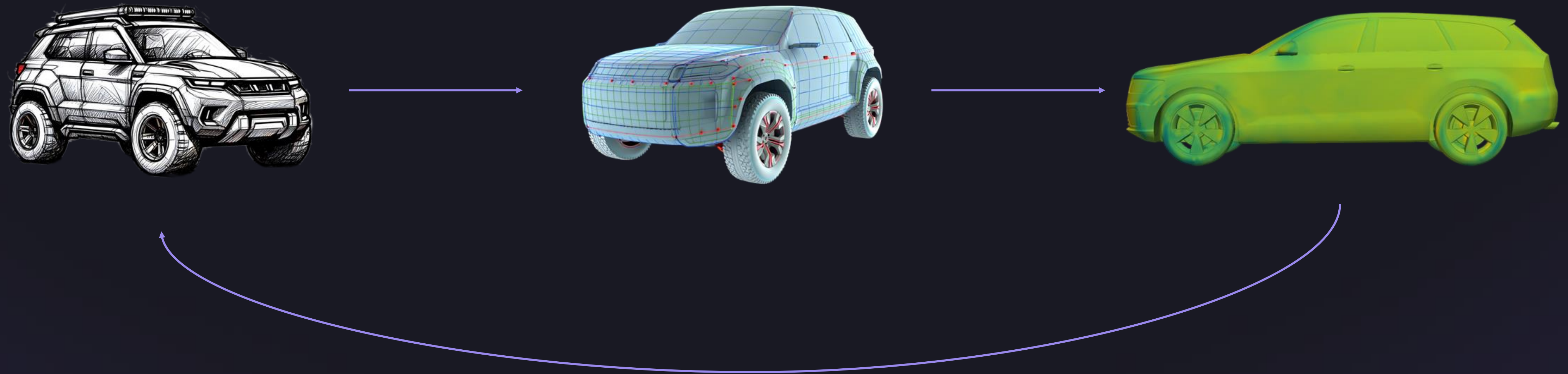
# Simulation Slows Design Iteration

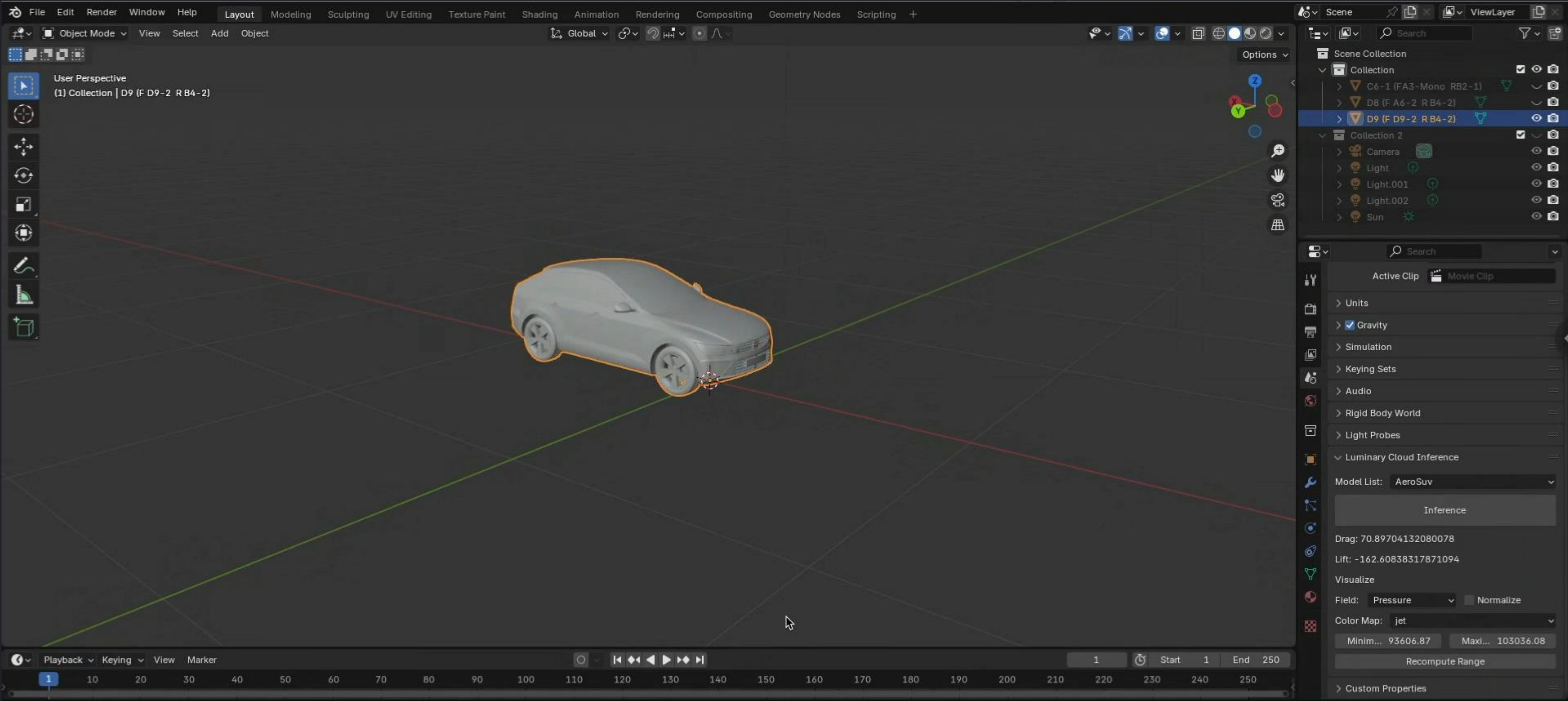
# Physics AI is Reshaping Engineering Design



# From Design Studio to CFD Simulations

Transforming the automotive design process





Baseline Design



Real-time Aero evaluation



Real-time 3D Design morphing



Real-time Design/Aero comparison

# Bringing information to the right place

Accurate and fast engineering insight where it is immediately actionable



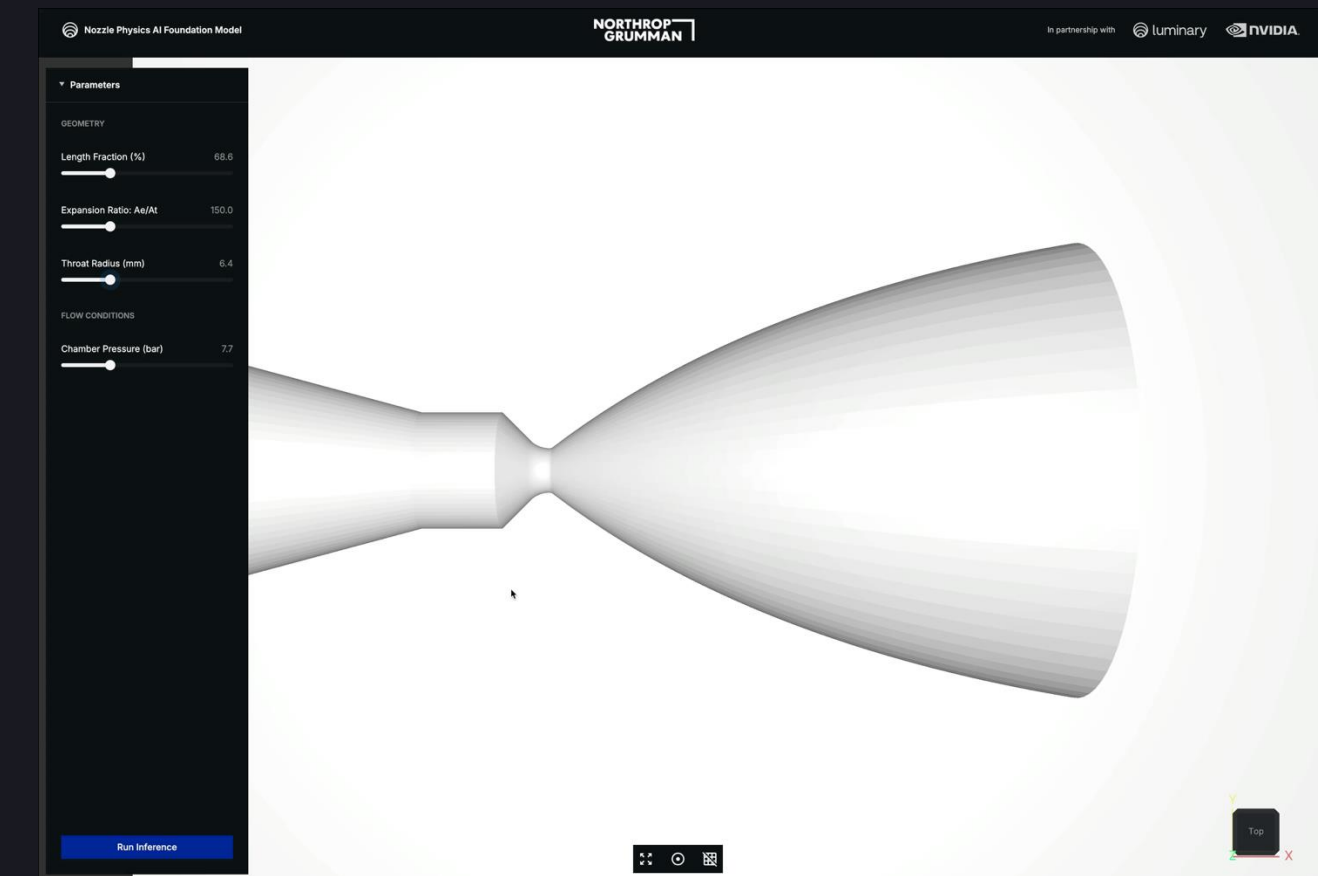
NVIDIA Omniverse App

Wind tunnel digital twin for photo-realism and interactivity



CAD / Design Software

Real time feedback to product designers, in the interface(s) where they make decisions



Custom Applications

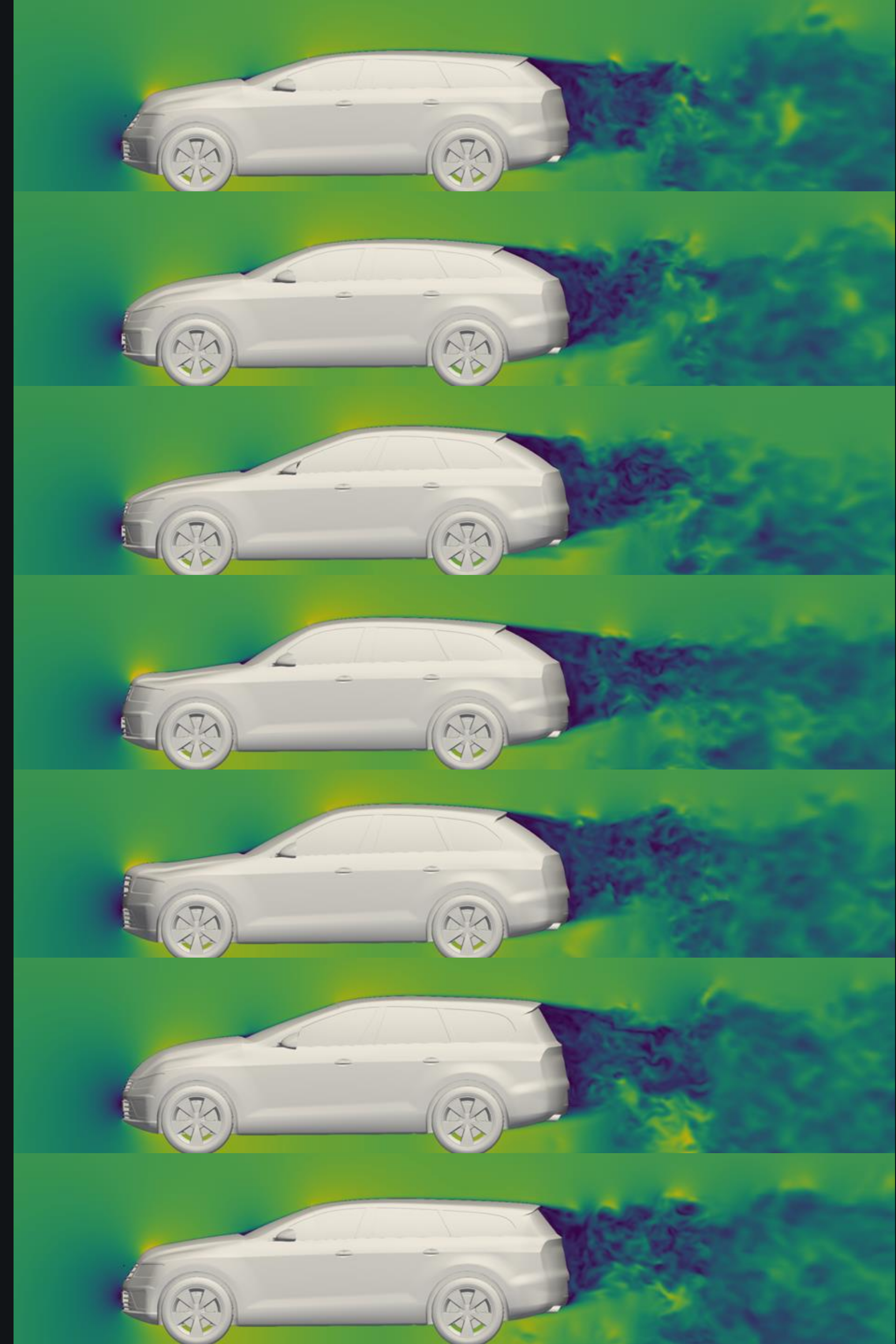
Customer and/or application-specific interfaces

# Data is the bottleneck

The Bitter Lesson

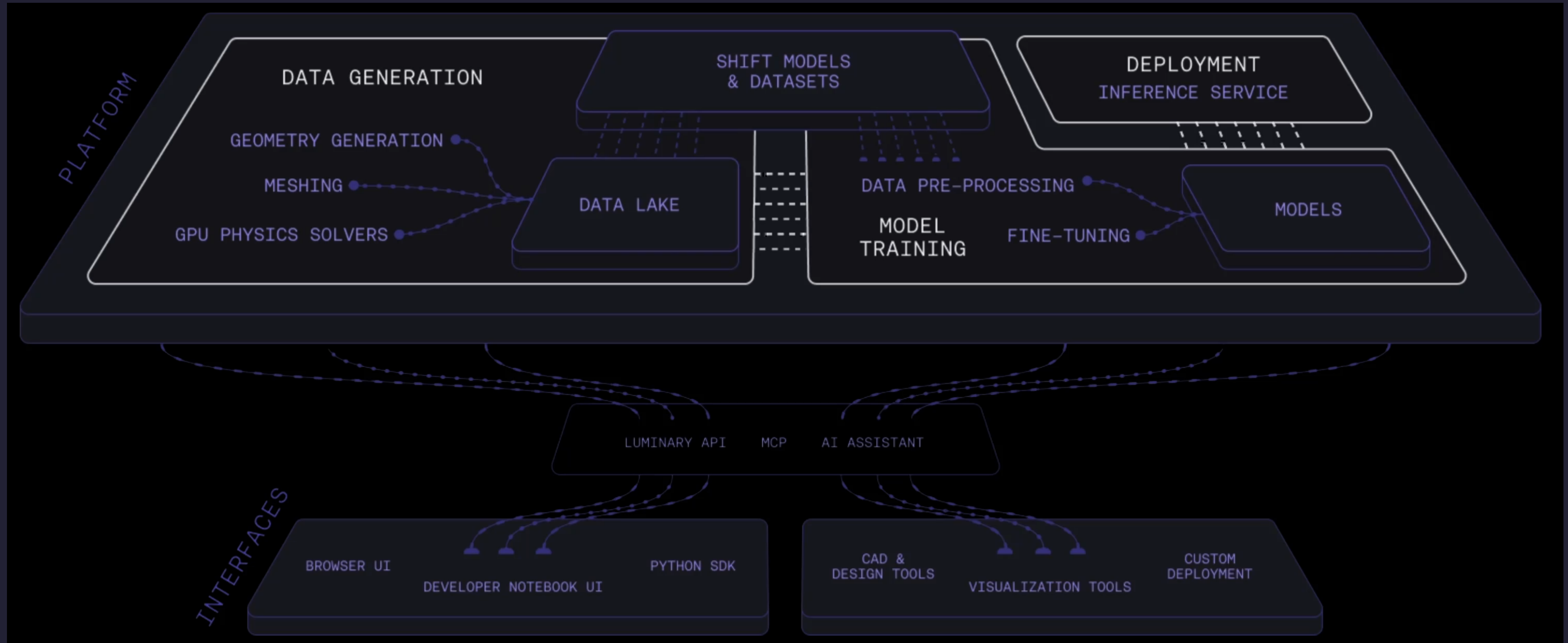
“Physics AI models are essential for real-time interactive engineering analysis and design, but require tremendous amounts of data.”

Neil Ashton,  
Distinguished Product Architect of CAE, Nvidia



# The Luminary Cloud Platform

A Physics AI Model Factory



# Physics AI Applications

Publicly announced Physics AI datasets & models

## HONDA



### Automotive

Aerodynamic performance feedback within the design tools

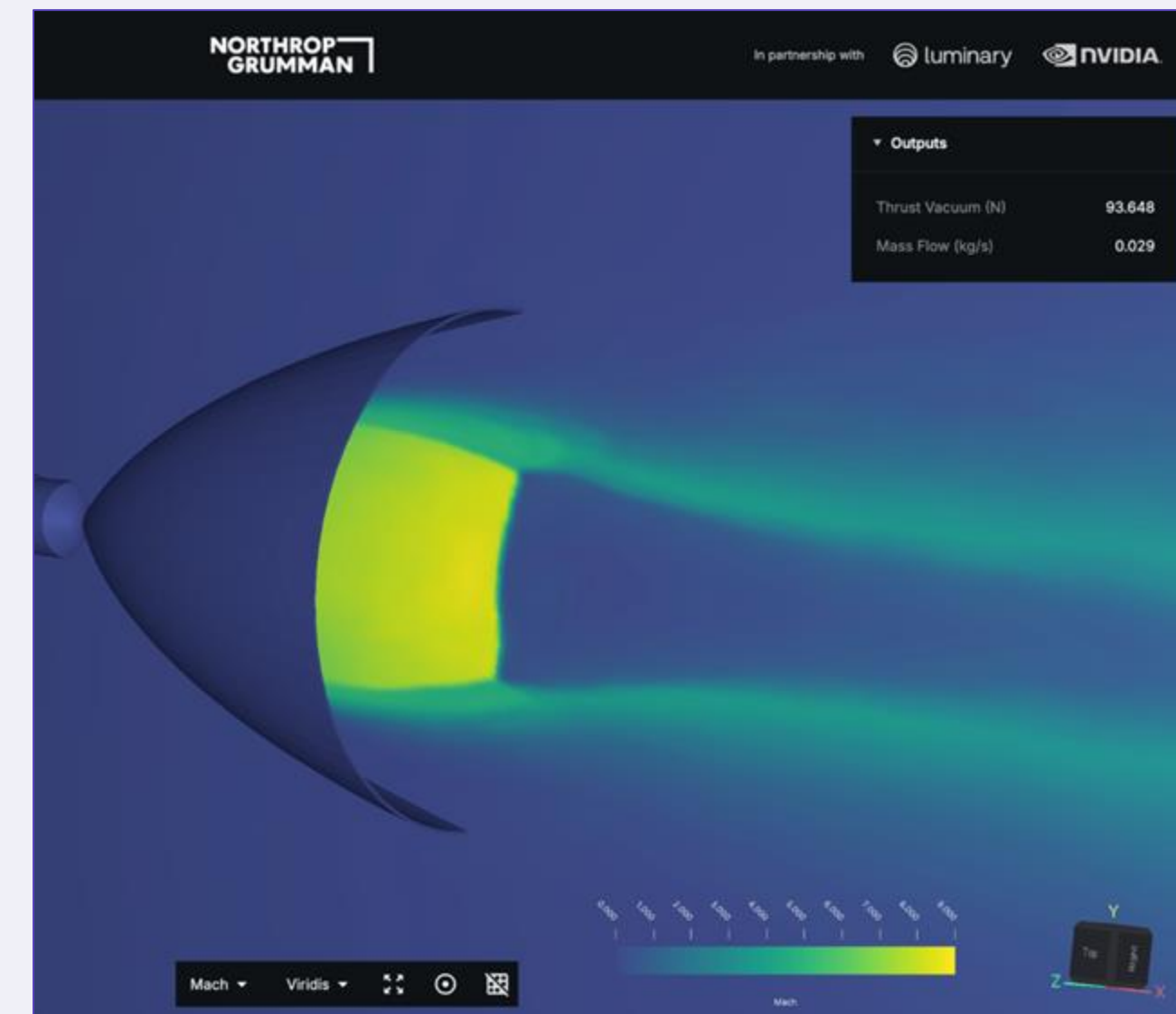
## OTTO AVIATION



### Aerospace

Conceptual design optimization to prevent sub-optimal design lock-in

## NORTHROP GRUMMAN



### Space Systems

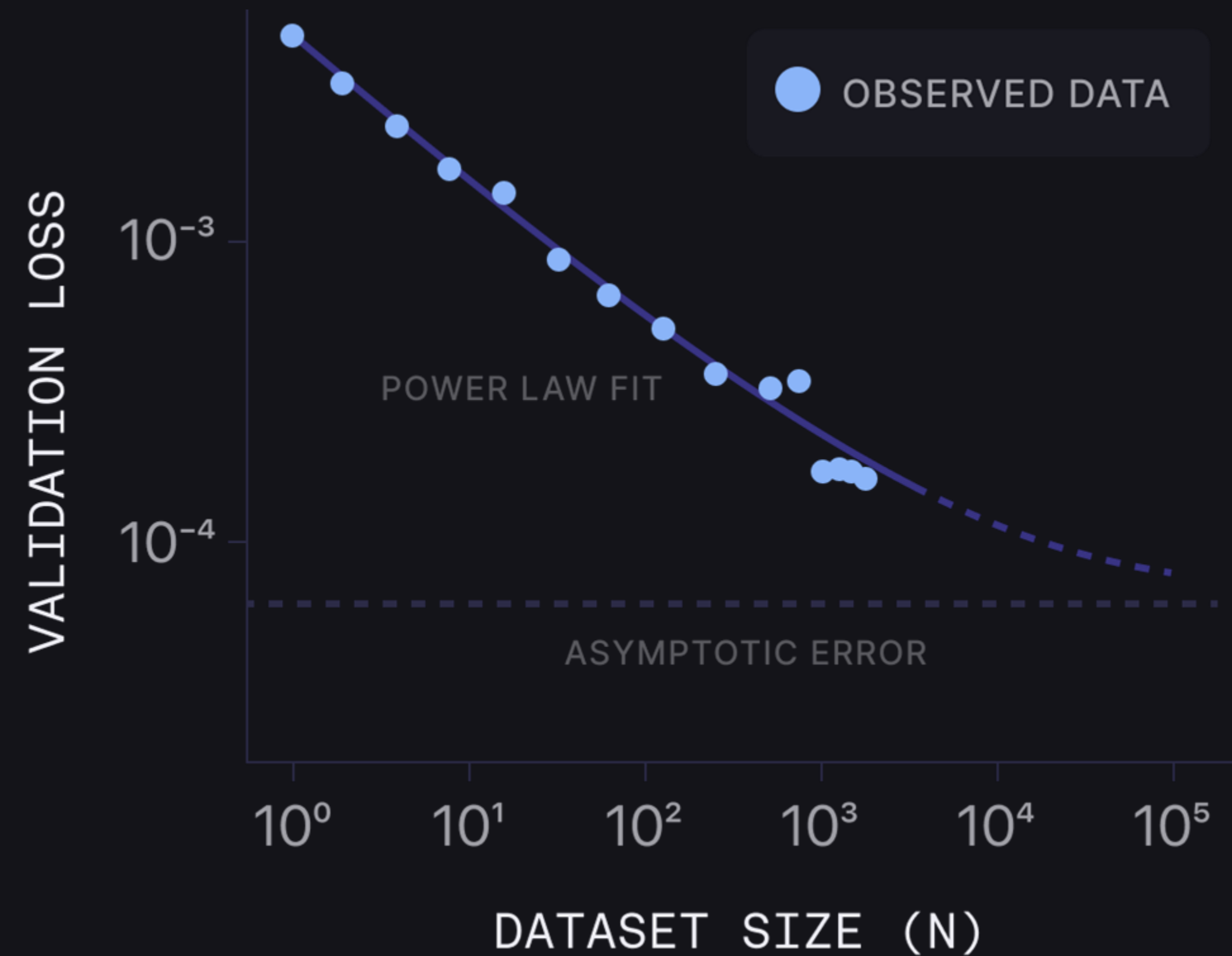
Spacecraft thruster nozzle design evaluations in seconds



# Scaling Law Validation

Applied Physics AI Learning: SHIFT-SUV

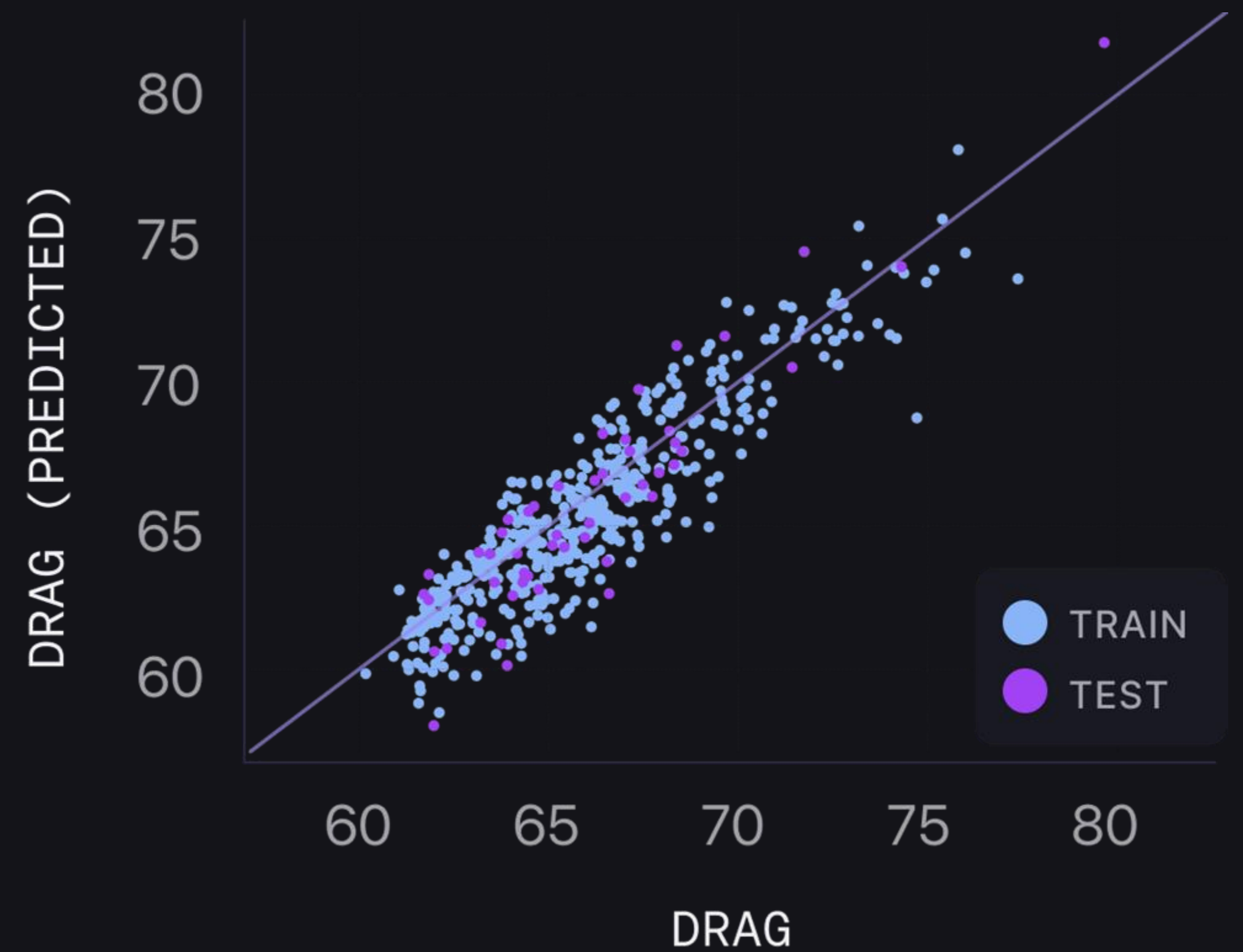
- Doubling dataset size reduces error by ~20%
- 10× increase in dataset size reduces error by ~45 %
- More data keeps improving accuracy until we hit the noise/model-capacity floor



# AI Predictive Accuracy

Applied Physics AI Learning: SHIFT-SUV

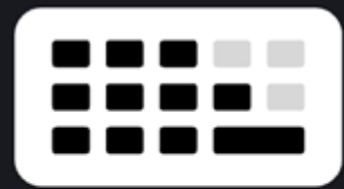
- Average Error ~2% error
- Maximum Error ~6% error
- 94% of predictions have less than 5% error
- All predictions are within 10%



# Luminary Cloud

## About Us

Recently announced \$72M Series B



Sutter Hill Ventures



N47



NVentures

Customers span automotive, aerospace & defense, industrial manufacturing, and sporting goods

## Team:



Pete Schlamp

CEO

Workday, Platfora, Cisco, IronPort, Sutter Hill Ventures. 20+ years in Product, Marketing, Strategy



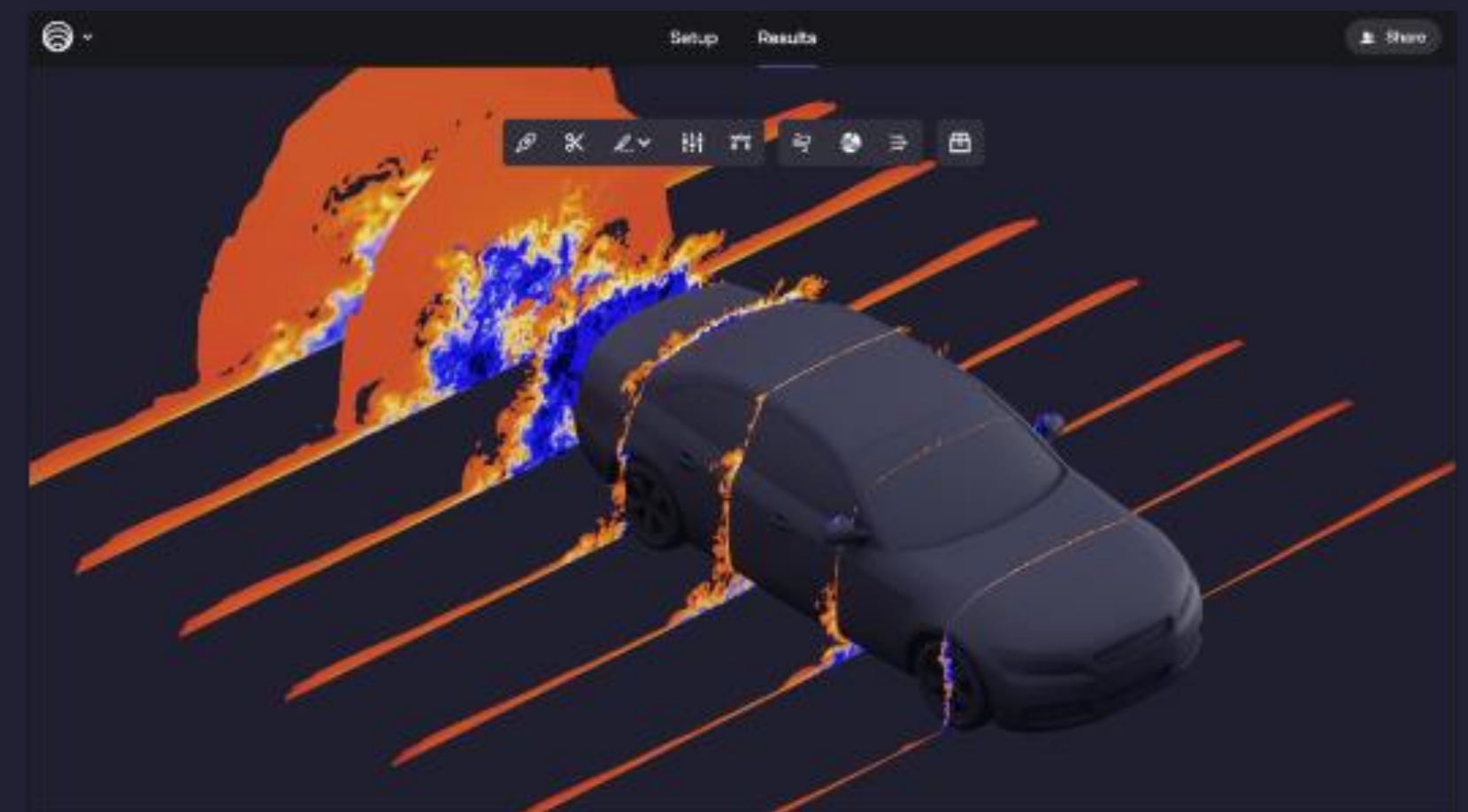
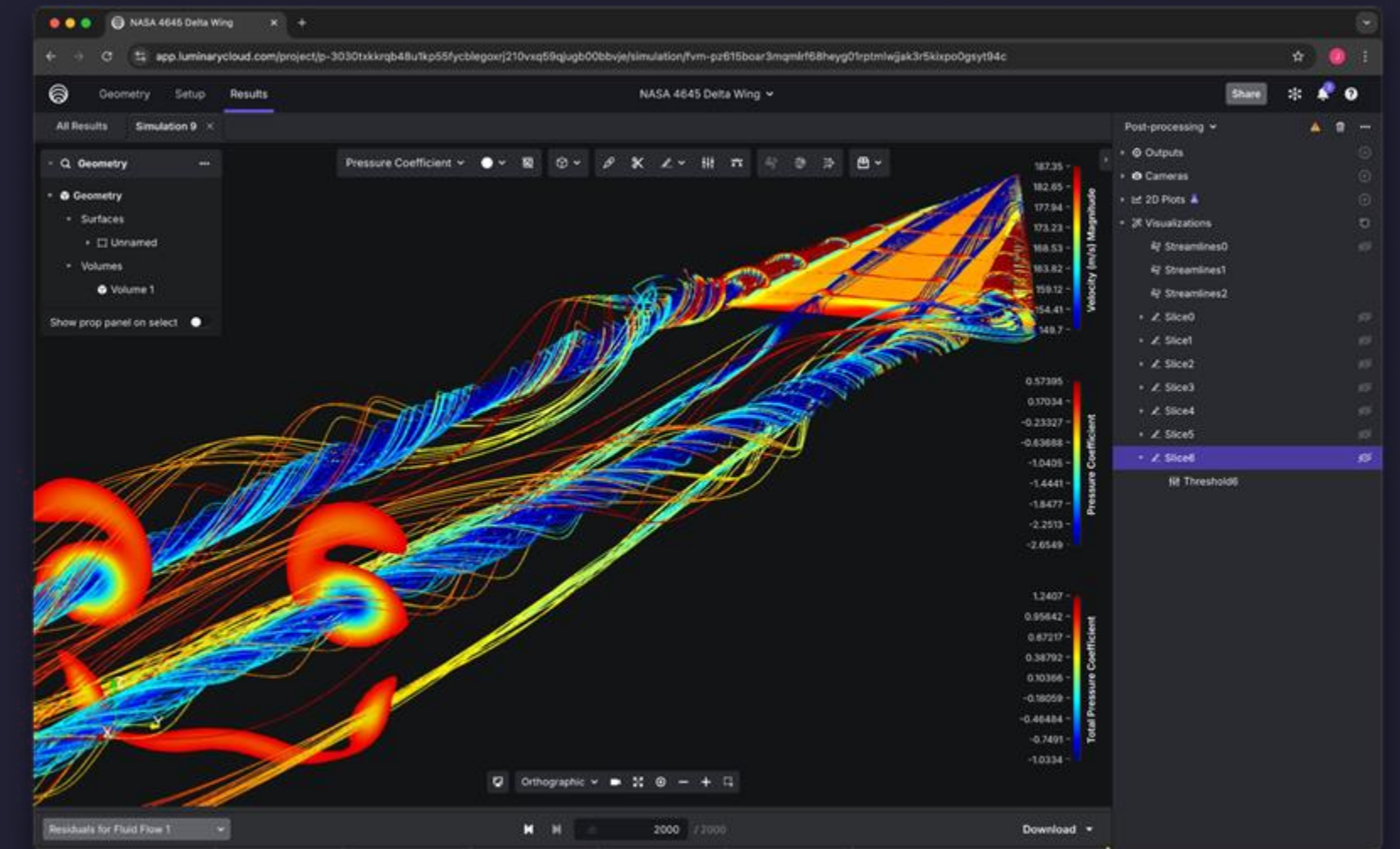
Juan J. Alonso

CTO / Co-founder

30+ years in Comp. Physics. Stanford University professor & chair of Aero/Astro department.

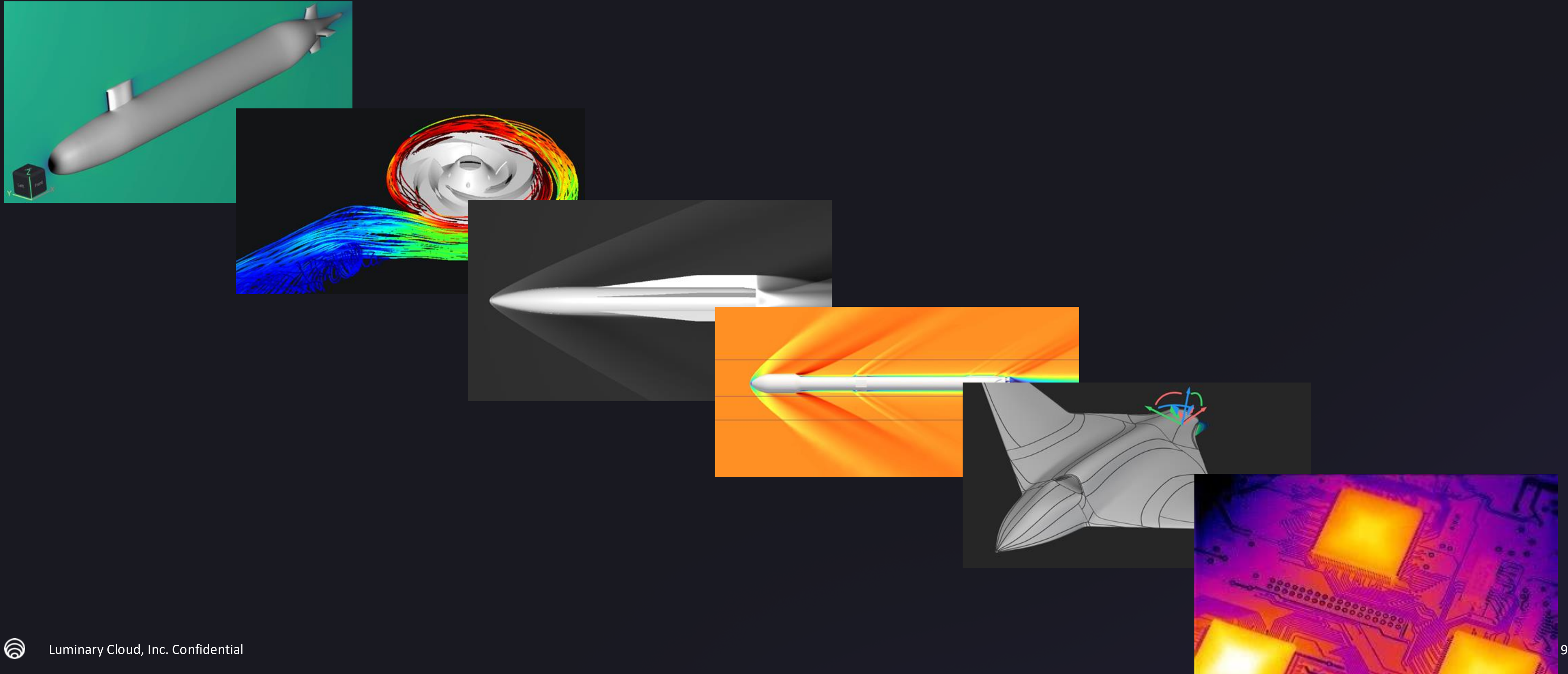
## Technical Team

25+ experts in physics simulation, graphics, Artificial Intelligence, and systems from Stanford, INRIA, and CAE industry leaders. 25 PhDs.



# Come Talk To Us

What's next and what can we do together?



The background features a series of overlapping circles in a light blue color, creating a pattern that resembles a Venn diagram or a series of connected nodes. A thin, horizontal blue line is positioned below the word "Questions?".

Questions?

PLUGANDPLAY

Sv summit



Startup Demo

---

Sanjay Pichaiah

Co-Founder & Chief Product Officer

Akridata™

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

# Akridata™

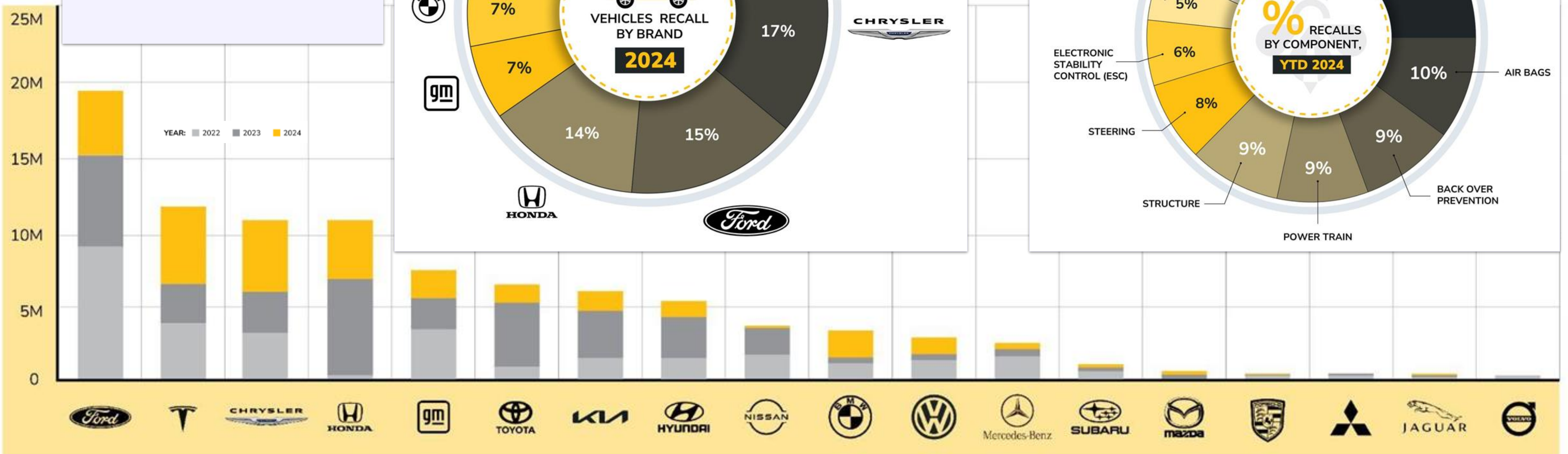
Physical AI for Visual Inspection  
Powered by GenAI.



# Automotive Recalls in 2024

## Recalls

- 2022: 29.0 Million
- 2023: 33.6 Million
- 2024: 27.7 Million



# Medical Device Recalls in 2024

## Alarming recall numbers

Device recall events surged to **1,059** in 2024, marking an **8.6%** increase from 2023.

Impacted units nearly doubled from **283.4 million** in 2023 to **440.4 million** in 2024.



Class I device recalls hit a **15-year high**.

### 01 Recall events

**Device failure**  
A five-year high comprising **11.1% (118)** of total recall events.

The next four common reasons for recall events:

- Quality
- Software
- Mislabeling
- Parts issues

### 02 Recalls by unit

**Parts-related failure**  
Comprising **28%** of total impacted units.

The next four common reasons for unit recalls:

- Device failure
- Quality issues
- Device expiration
- Instructions updates

# Problem: Inspection Bottleneck



MANUAL INSPECTION

- **Inconsistent**
- **Slow Throughput**
- **Costly & Hard to Scale**



AUTOMATED MACHINE VISION

- **Fragile - Rule based systems**
- **Struggles with Subtle Defects**
- **Closed & Rigid Systems**

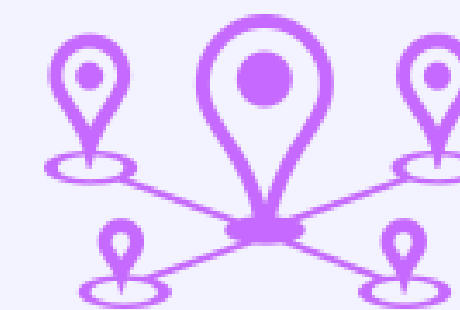


## Who we are

---

- Experienced Management team with deep enterprise tech startups and scaling to successful exits
- ~30 strong employees bringing collective experience in manufacturing, Enterprise products, AI/ML research, Computer vision and Hyperscaling
- Trusted by Global Brands

Seeded by



USA - Los Altos, CA (HQ)  
Austin, TX, Pittsburgh, PA  
Tokyo - Japan  
Bangalore - India

# Trusted Engagements

(Production + Pilots+ POCs)



BRUNSWICK

Medtronic



J&J



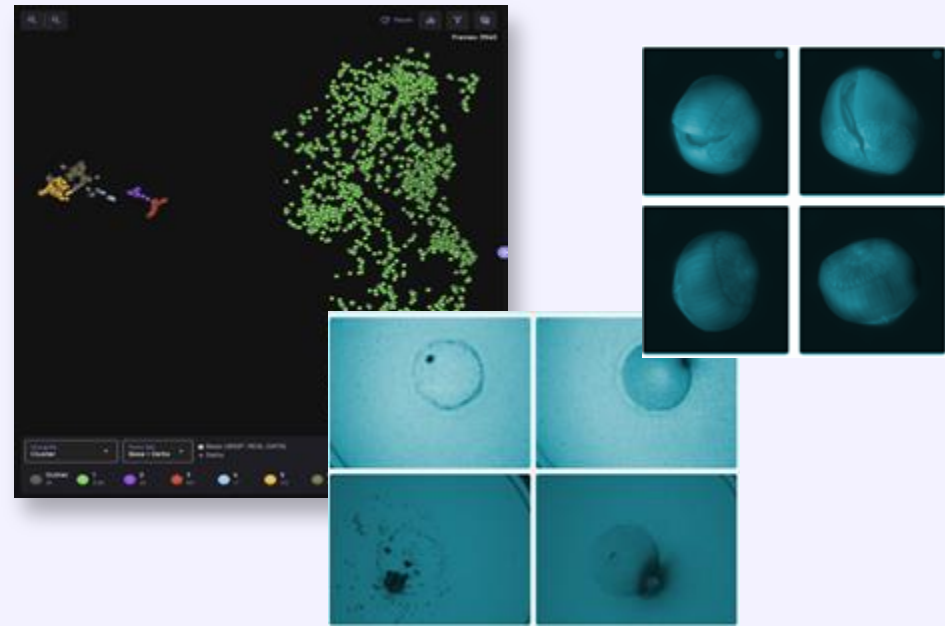
FUJIFILM

# What Are We Offering - Product Suite

## Vision Copilot

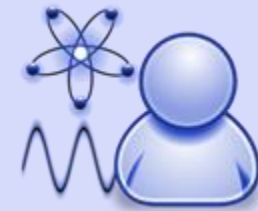


Data Science/  
MV Team

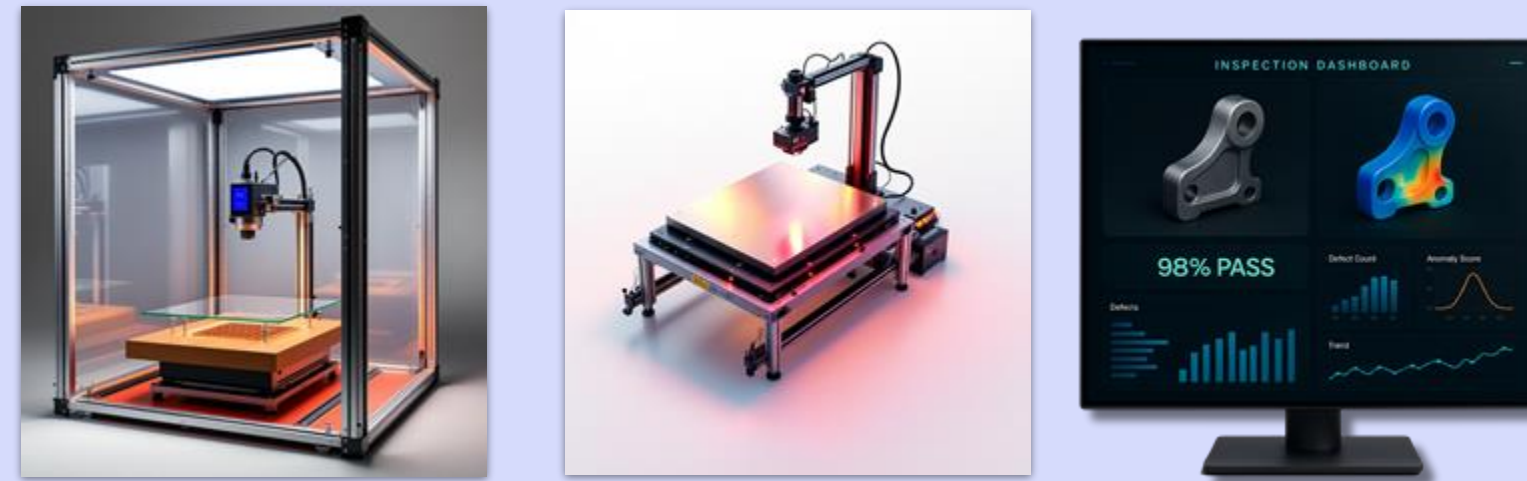


- One stop shop to **Curate Data, Build State of the art Computer Vision Models**
- **Harnessing the power of Gen AI**

## Vision Assist



Quality Inspection/  
Automation teams

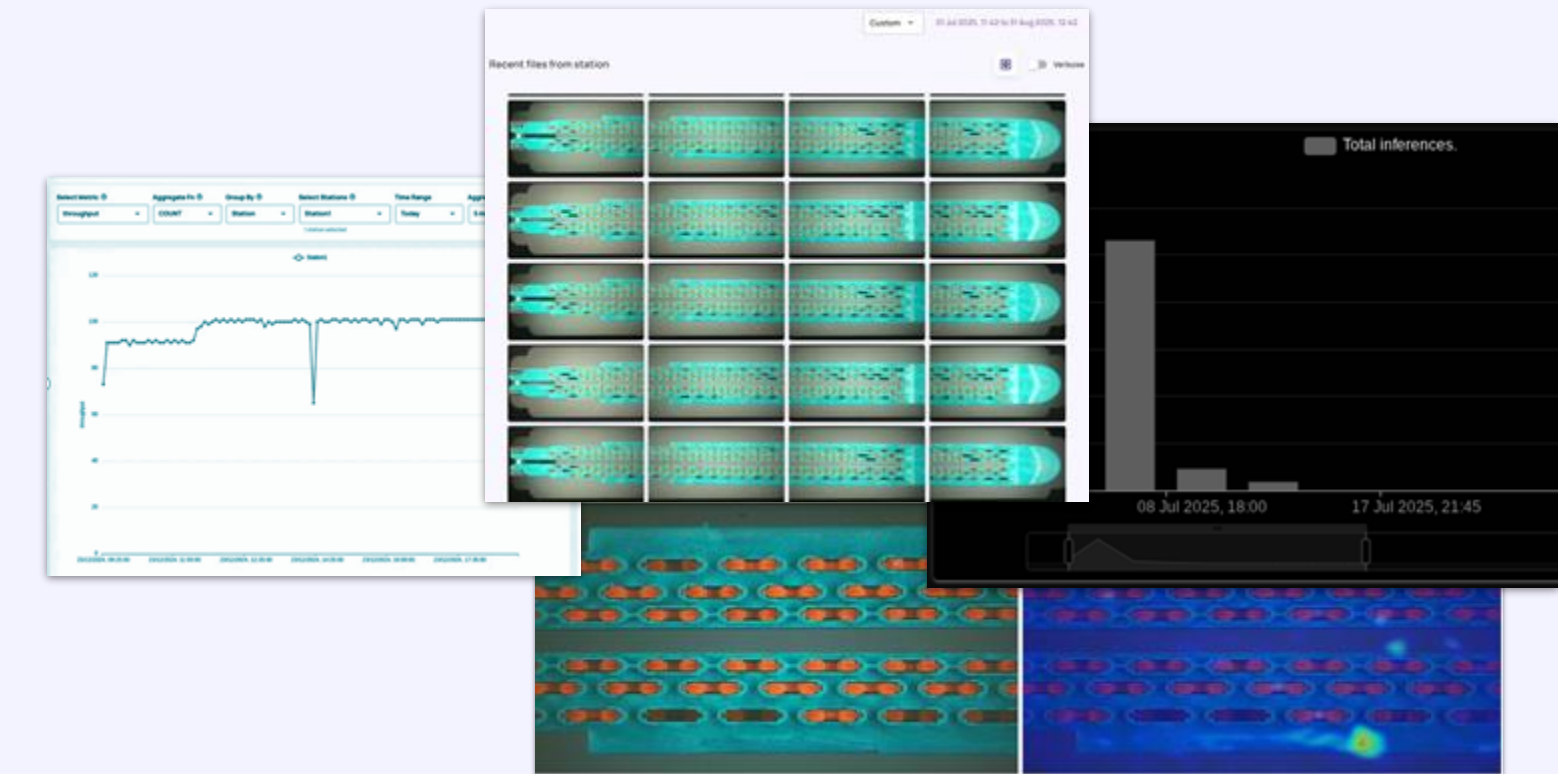


- **Akridata delivers Customized Full solution to supercharge your human inspection and/or automated inspection systems**
- **Identify even the subtle defects, consistently and fast.**

## Vision Command

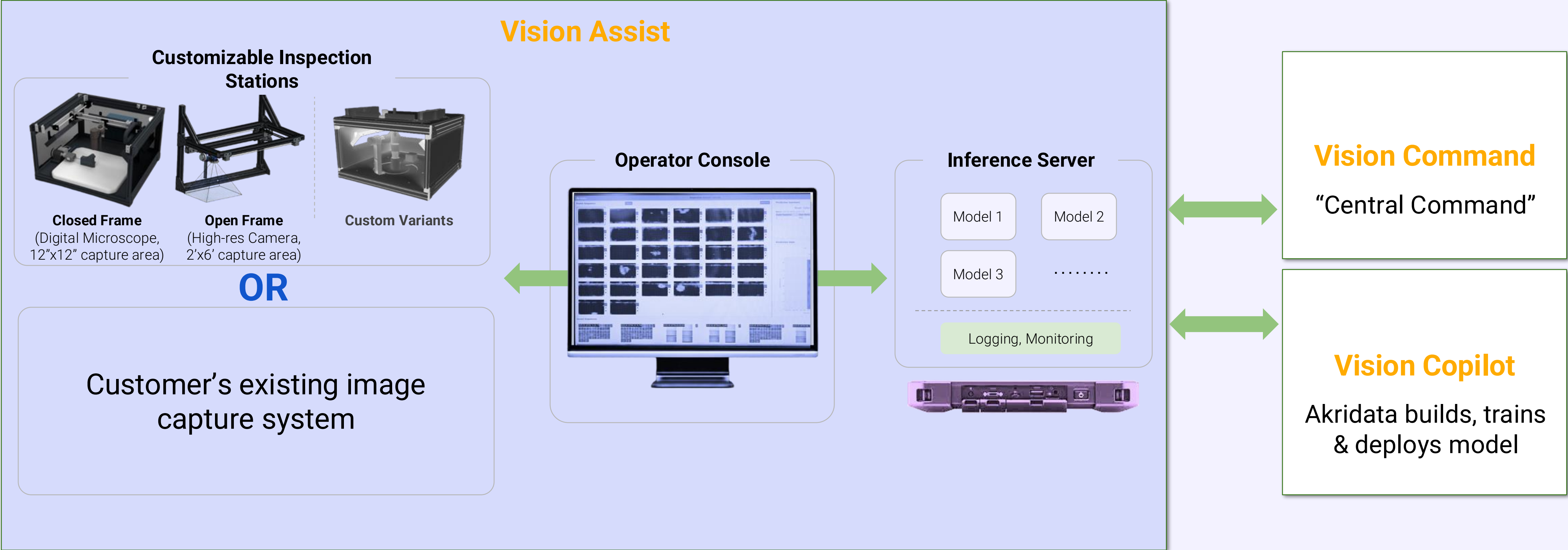


Plant Operations, QA managers,  
Process Management teams



- **“Command Center”** - Deploy/Update, monitor performance, metrics/KPIs
- Easily **identify process variations**, across manufacturing lines or stations.
- **Auditable image & defect repository, compliance lineage**

# Modular Building Blocks - For Customizable AI Solution



On-Premises or Private Cloud. Fully Auditable and Secure

## Why it matters?

**5–10× Faster  
Inspection Cycles**

- Demonstrated in replicating customer workflows for balloon catheters, titanium mesh, and automotive seals etc.

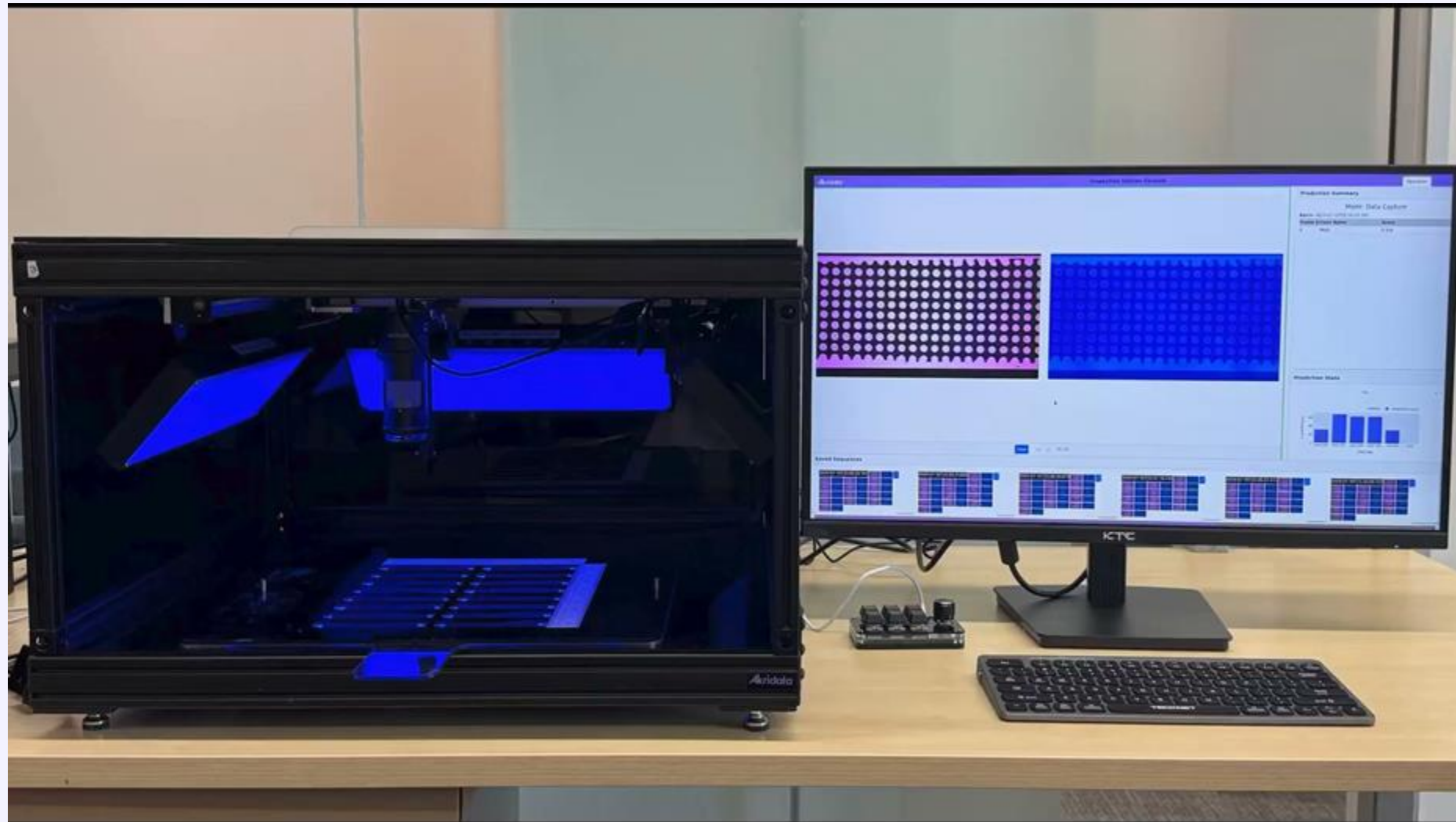
**> 98.5% Detection  
Accuracy**

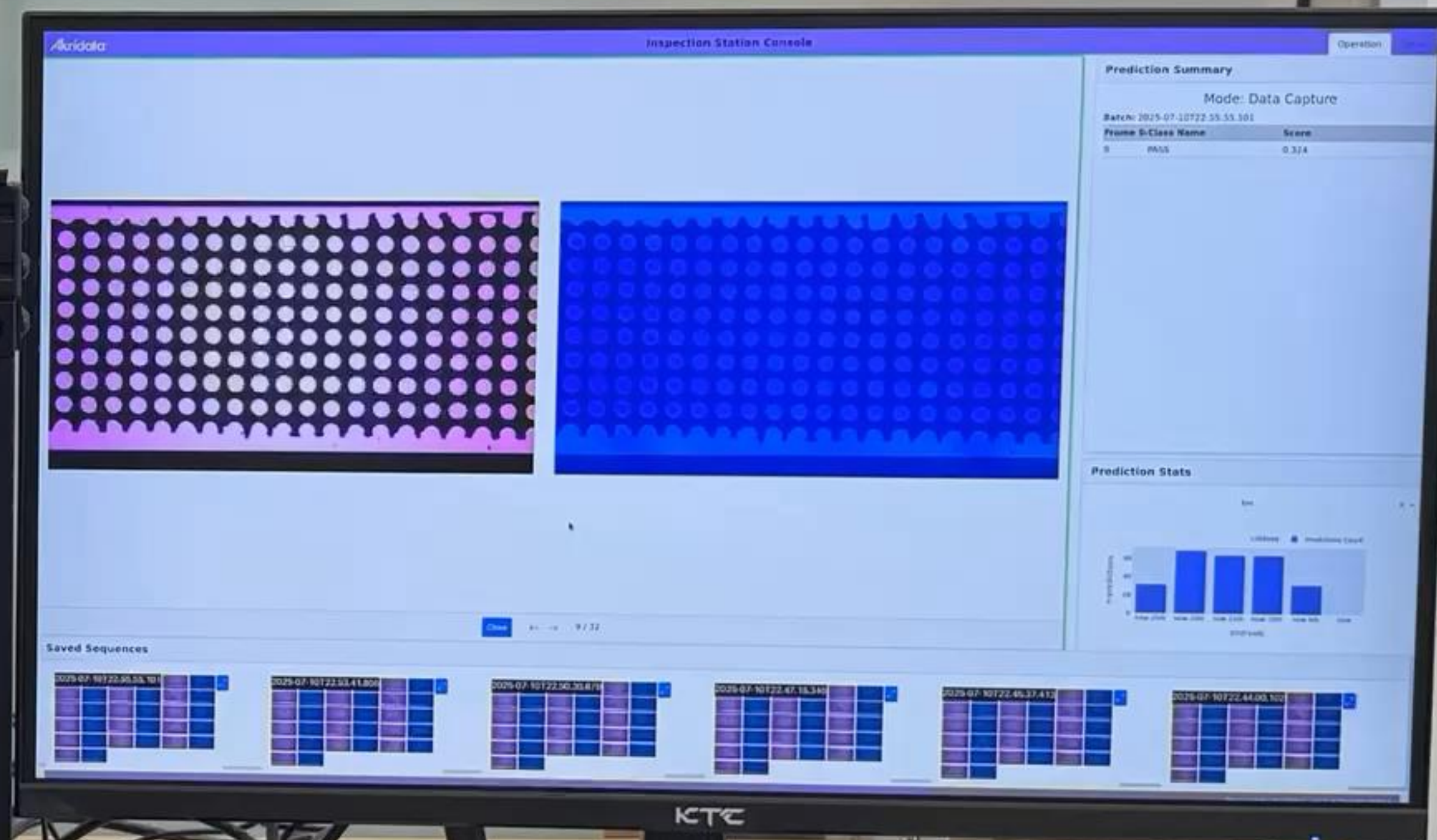
- Handles natural variation that traditional rule-based vision systems miss
- High precision subjective decision making

**> 300% ROI**

- Typical Payback < 12 months
- Reduce OpEX

# AI Powered Vision Assist System (Sample Systems)



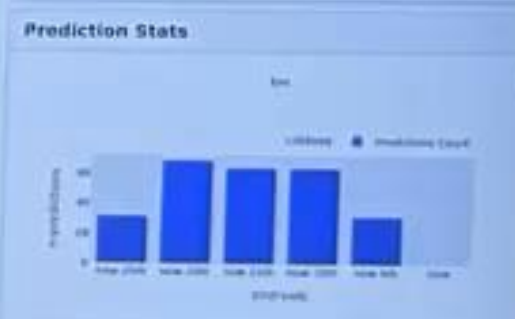


Prediction Summary

Mode: Data Capture

Batch: 2025-07-10T22:55:55.101

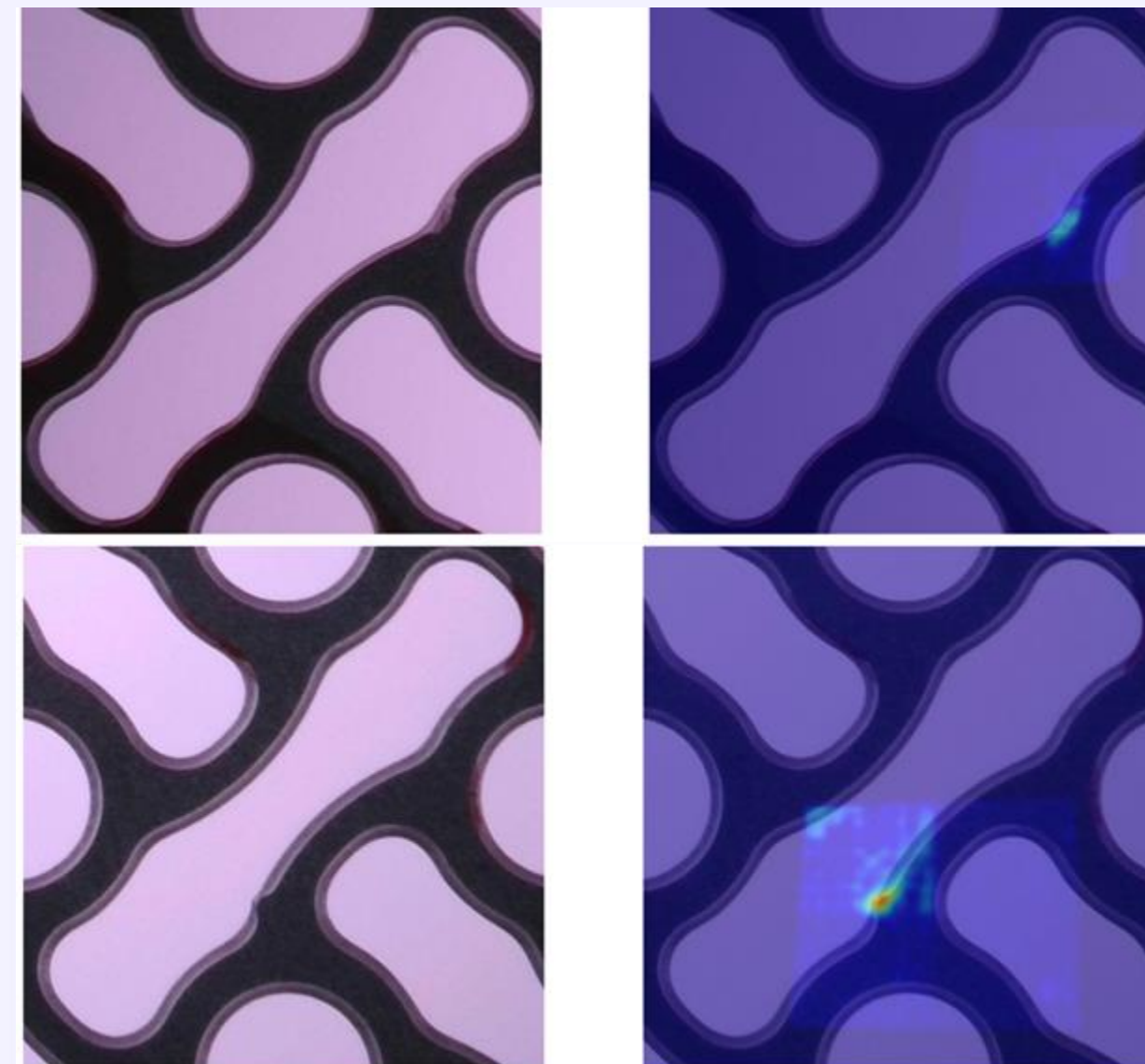
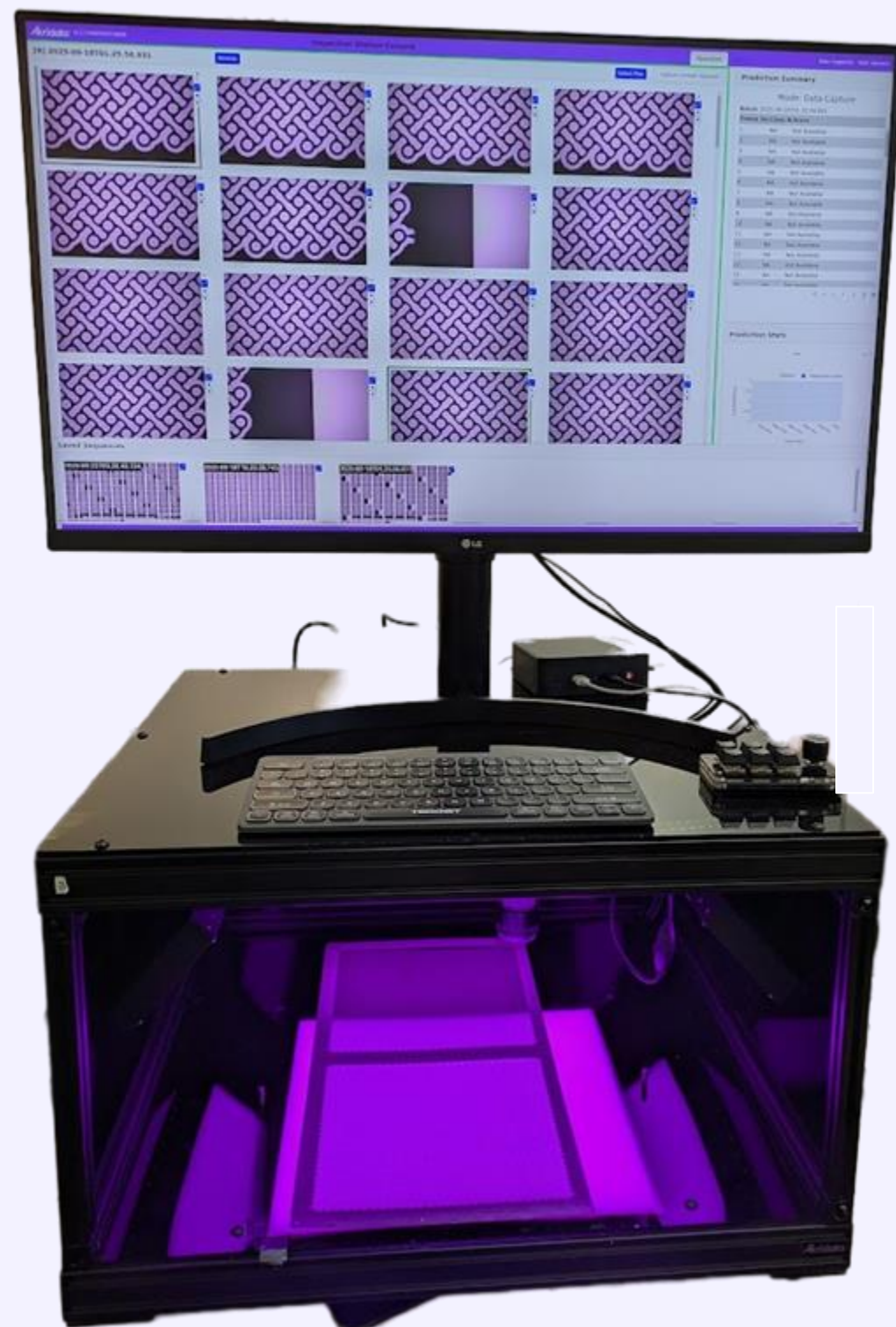
Frame ID	Class Name	Score
0	PASS	0.374



## Inspection of Precision Titanium Mesh for Cranial Surgery

### Before:

1. Human Inspection of the part took **15-30 mins per part**
2. Inspected repeated patterns under microscope hours at a time is very error prone
3. Need to reduce the total man hours spent on inspection.



A slice of  
Original image

Akridata  
detects defect  
real-time

### Solution:

- Built and deployed customized solution (System + HMI S/W + State of the art Models)

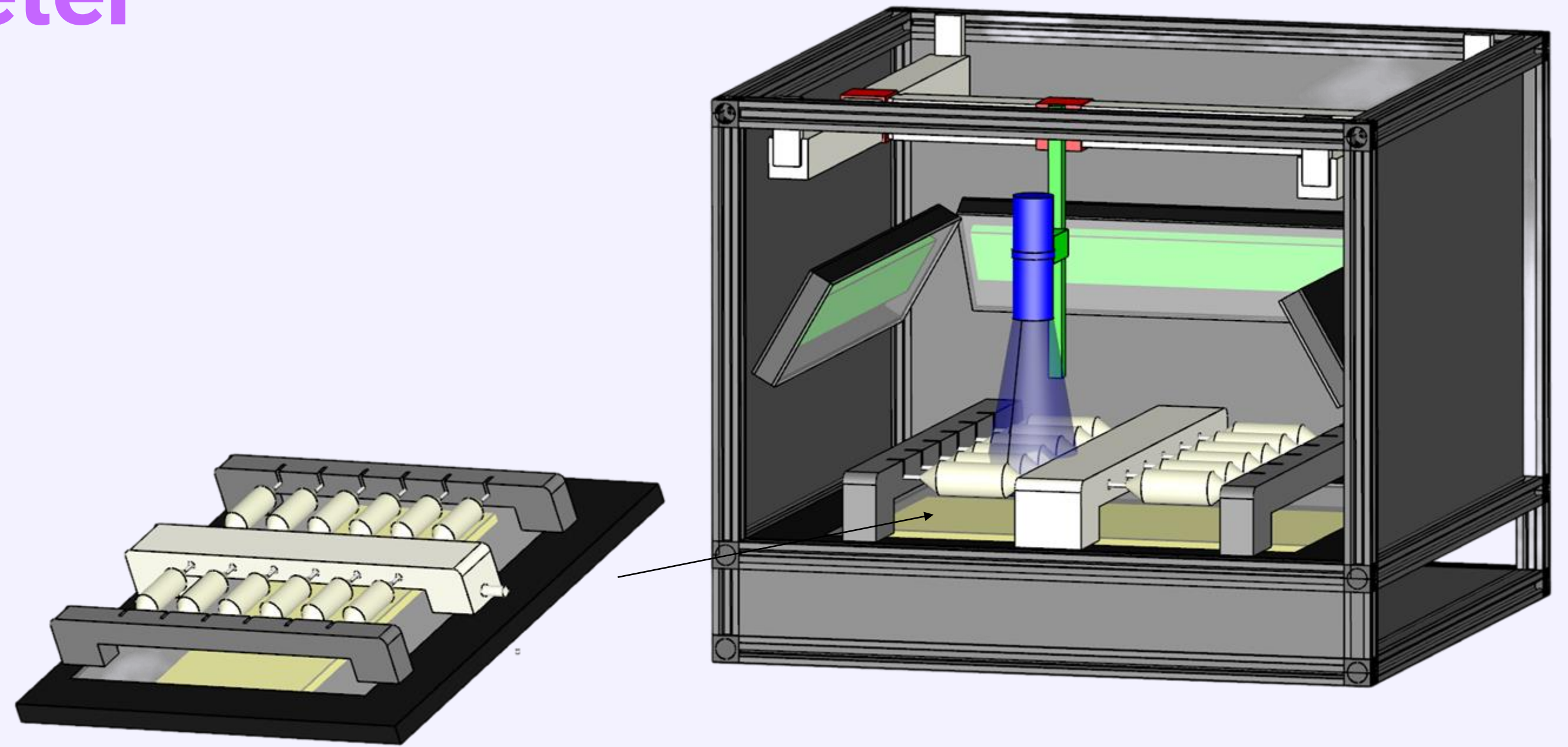
### After: (With Akridata)

- Identifying and grading of parts (Pass, Fail, Review)
  - Reviewed parts -> process improvement in mfg
- **8x faster inspection (~2 mins - 4 mins)**
- **>\$500,000/yr savings from reduction in OpEx**
- Auditable reports

# Inspection of Balloon Catheter

## Before:

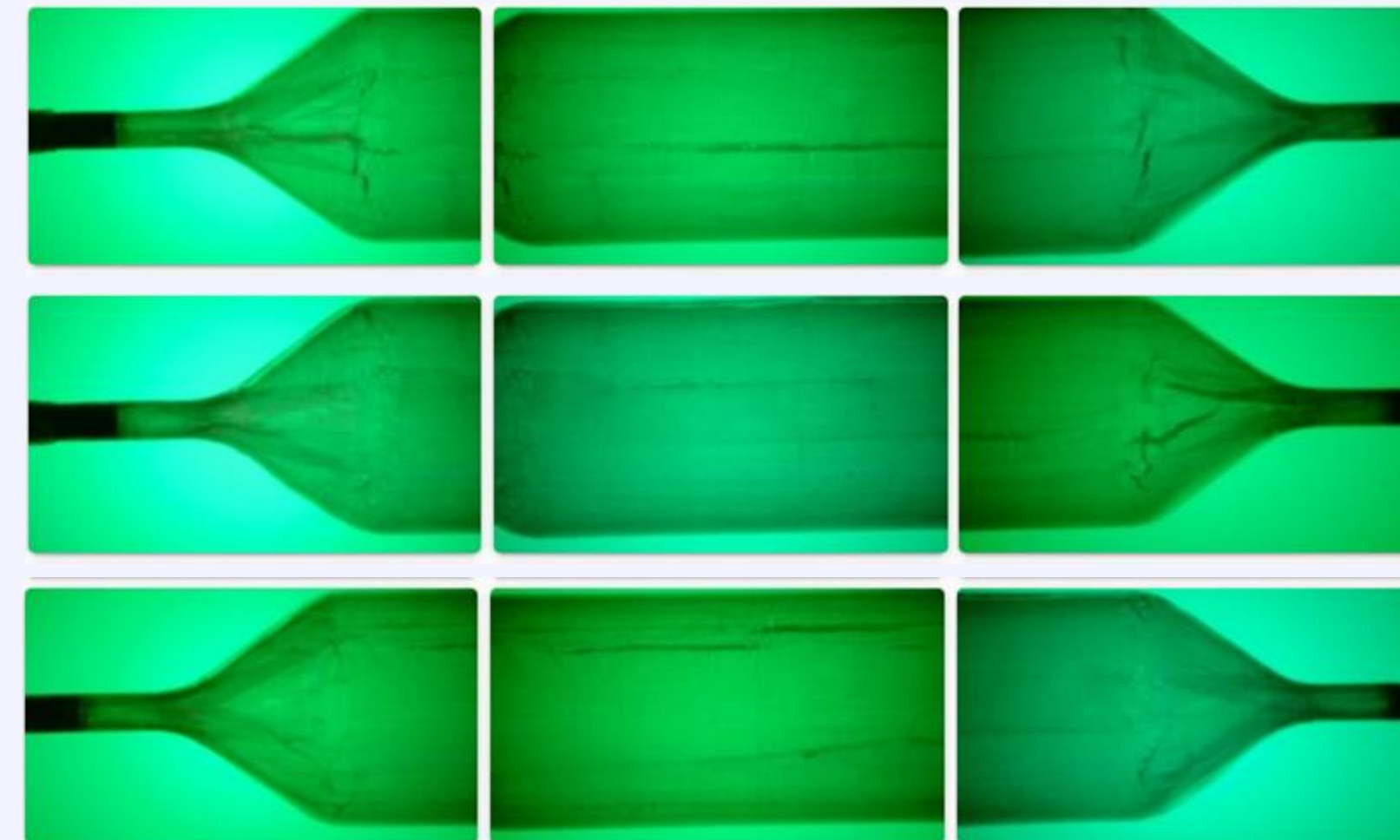
Manual inspection of the Balloons to identify subtle defects was time consuming (~1 min/part) and very subjective.



## Akridata solution:

Built a customized system with an active tray where the inflated balloons were loaded.

The balloons are automatically rotated while multiple images were captured to get complete coverage of each balloon under specific controlled lighting conditions.



# Inspection of Balloon Catheter (Contd.,)

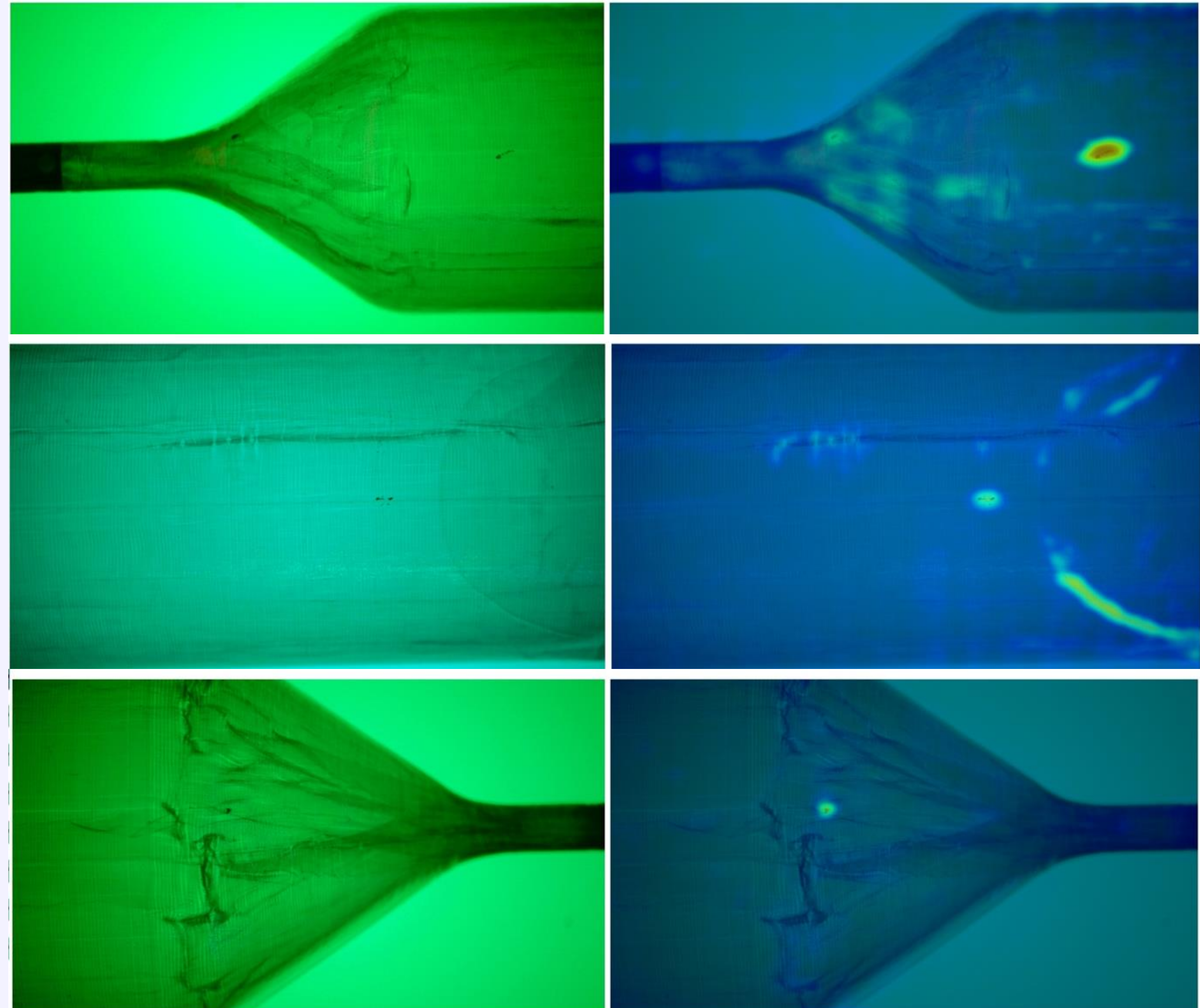
## Challenges:

The balloon when inflated still has the **natural wrinkles** (which are not defects)

Traditional computer vision systems do not work with natural variations such as these wrinkles while looking for tears, foreign particles and separated membranes

## After: (With Akridata)

- **> 98%** accuracy to identify particle contamination, blisters and inner membrane separation on balloon catheter
- **3x faster** in inspection time and consistent



## Inspection of Automotive Components

### Before:

4 operators x 2 shifts = 8 people inspecting parts coming out of the stamping machine



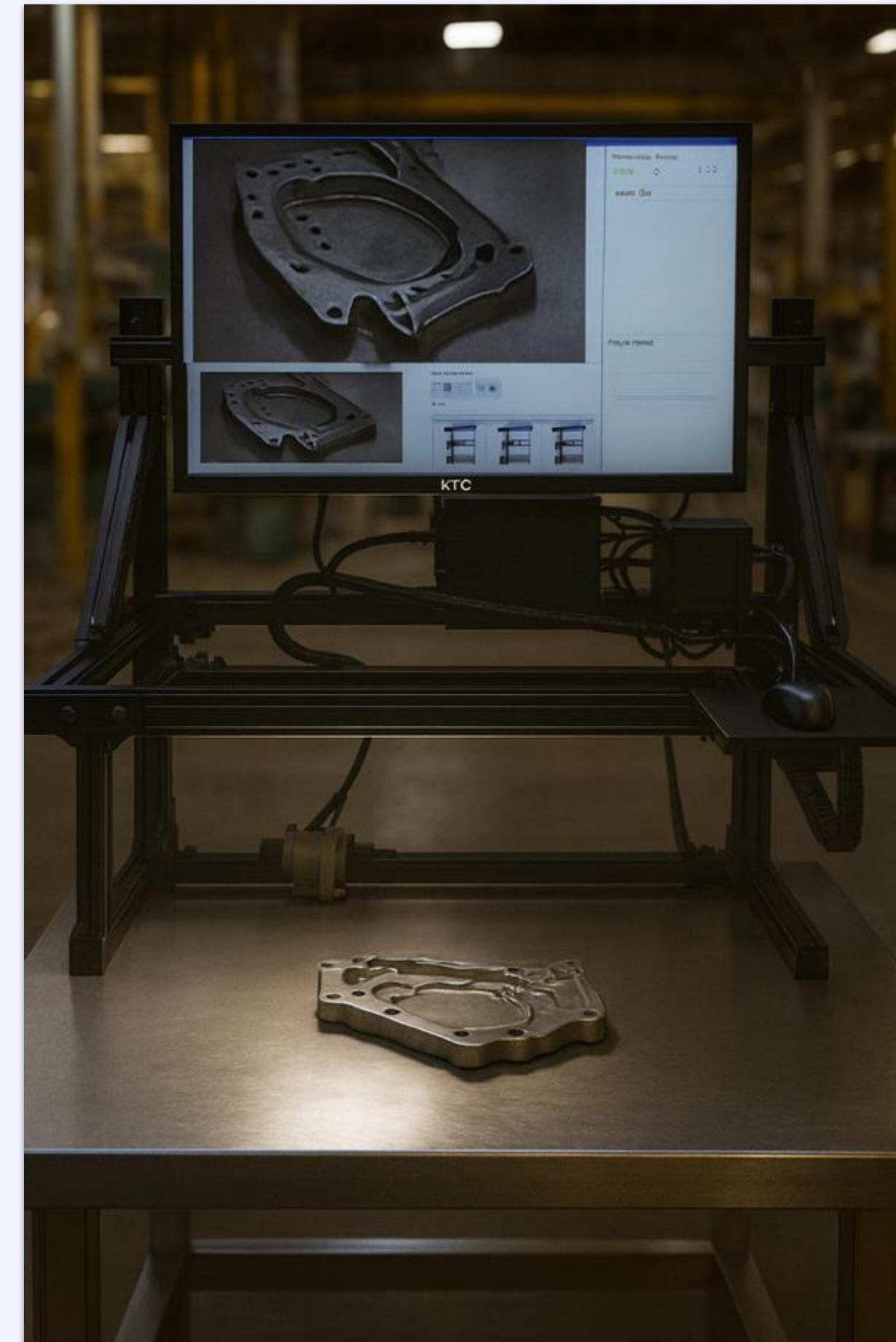
### Issues:

- Challenging to keep focus for 8 hours straight and **reliably detect defects** on parts continuously rolling out of the assembly line
- **Recalls are expensive**

### After: With Akridata

2 operators x 2 shifts = 4 people

**300% ROI**



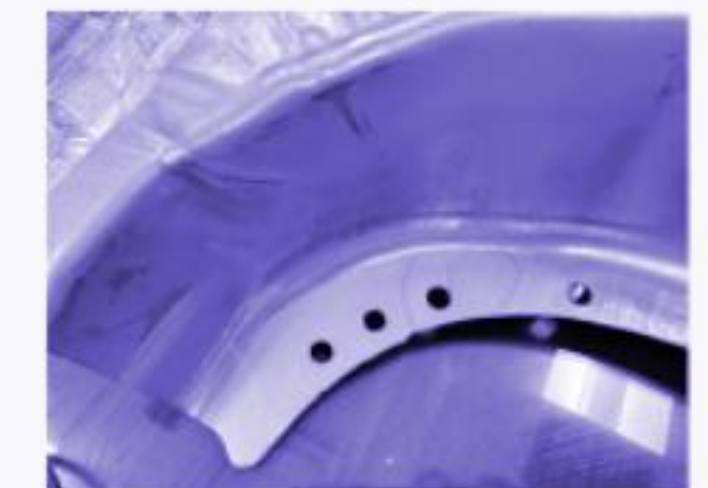
### Defects in scope (Samples)



Cracks



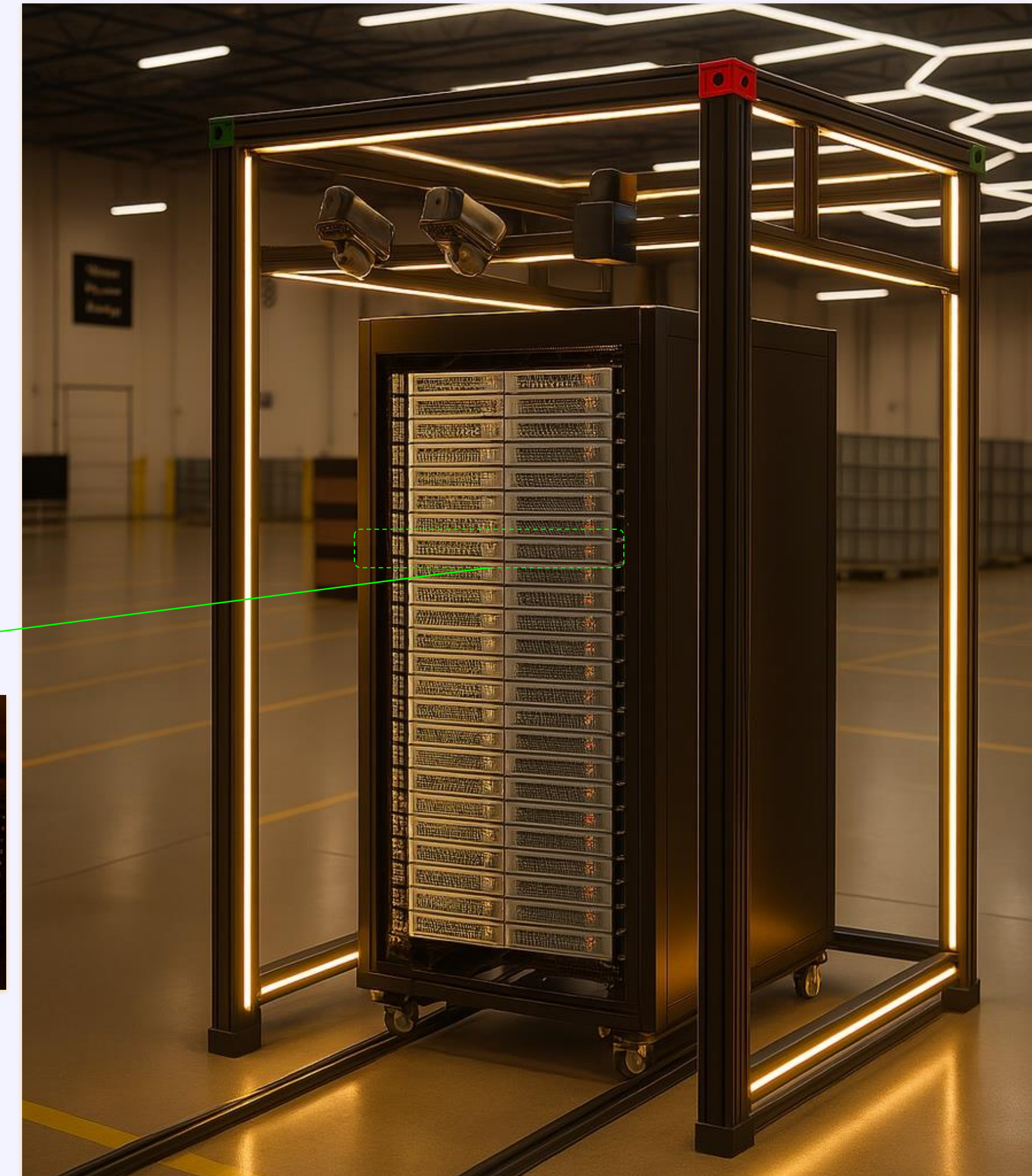
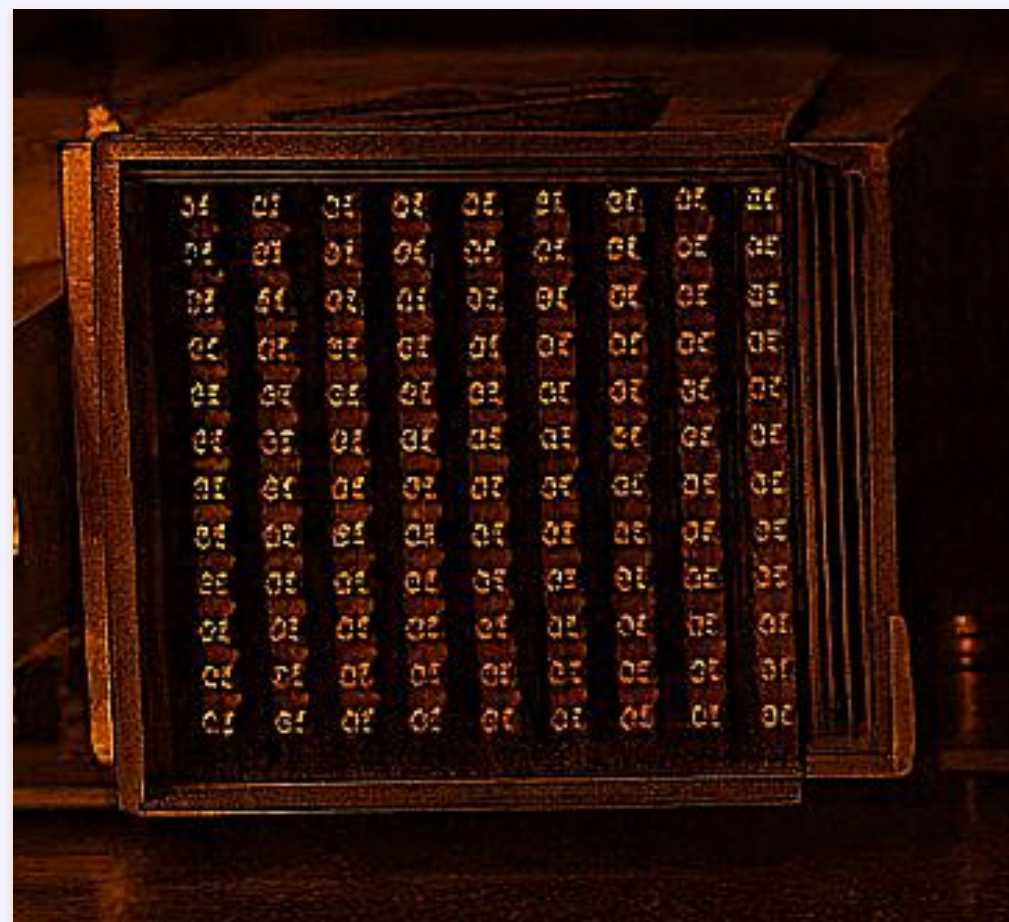
Overlaps



## Automated Inspection of Rack mounted systems

**Before: Manual inspection** of these multiple high speed networking systems about **30 mins to 1 hr** to thoroughly inspect. Error prone and high cost impact

**After: With Akridata's automated solution**, they can inspect every connecting module and pins in **~5 minutes** with very **high accuracy** and creating an image archive for **audit and claims management**



## AI Assist to Human - Seal Inspection of Automotive Doors

**Before:** Manual cleaning and inspection

8 Operators ( 1 per Station, 8 Stations) work 12 hour shift (24 hrs 5 day week)

Issue:

5% to 10% defective parts escape the inspection significant costs and backlog in reworking the doors.

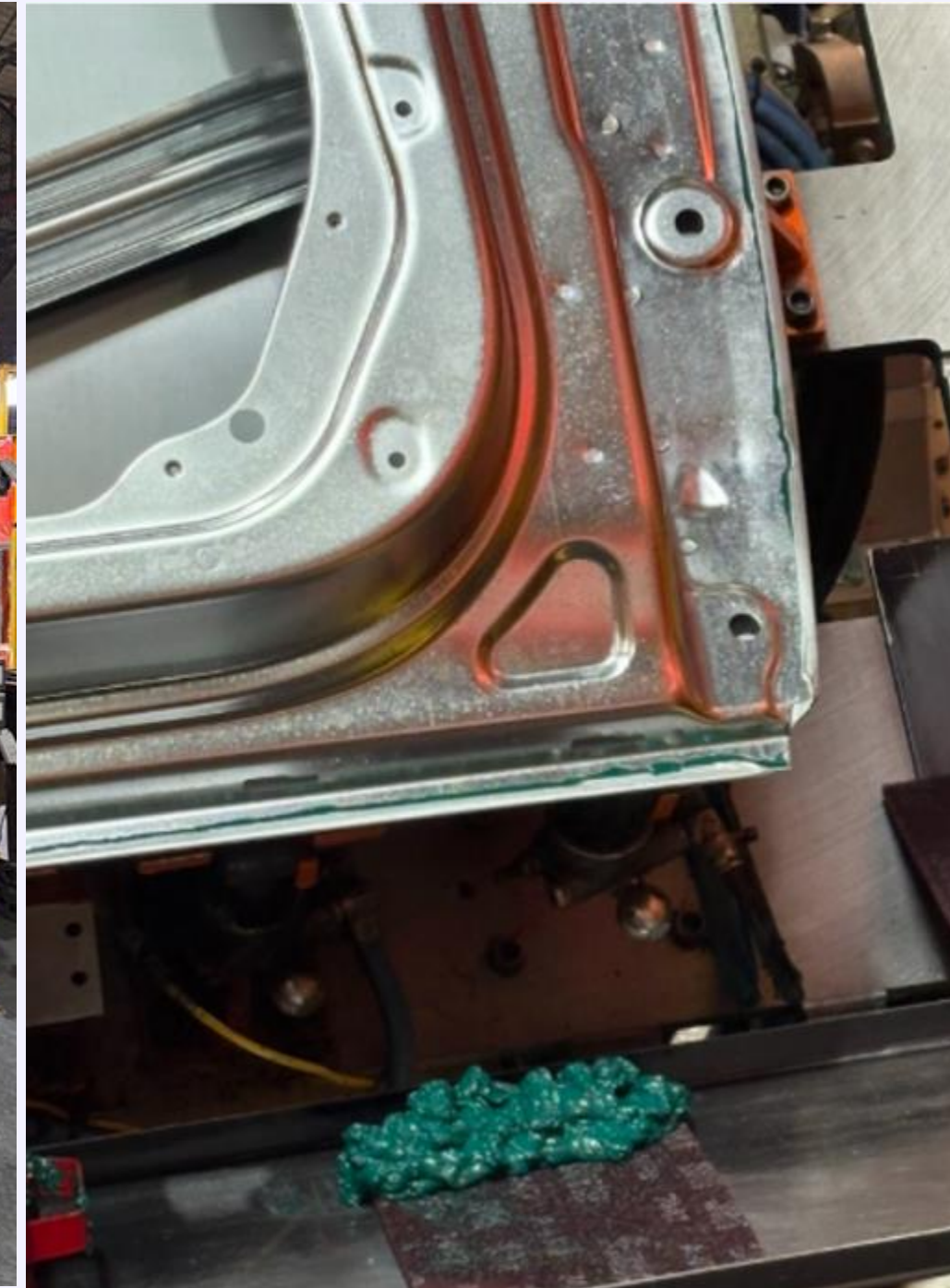
**With Akridata:**

**Integrated AI inspection solution assists the operator to see the defect real time**

Multiple high resolution images and AI inferences are stored for record keeping, auditability and process improvement analysis



Existing Inspection Station fitted with high density cameras on fixed mounts



Close up original



AI model showing regions of defect

# Turn Inspection into Your Competitive Advantage...

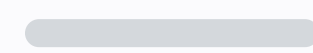
*... Powered by Gen AI and Akridata*

Sanjay Pichaiah  
Cofounder  
[sanjay@akridata.ai](mailto:sanjay@akridata.ai)





Startup Demo



Yichen Jin

Co-Founder & CEO

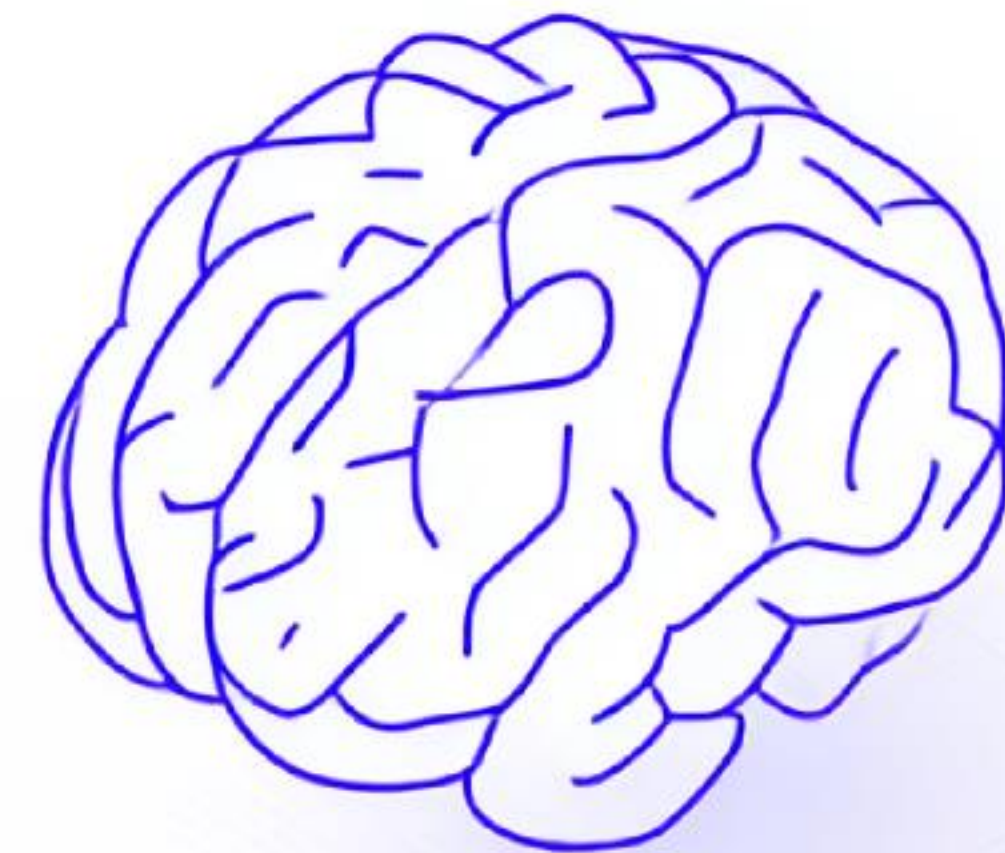


#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

# Universal Data Transformation Fabric

AI Native Data Engineering



# Fleak:

## The Universal Data Translator

- Pick a destination schema framework such as **OT**
- Deploy on the edge or in the cloud
- Process millions of events per second
- Self-adapt to input data drifts
- Complete governance and data sovereignty
- Real-time translation

OCSF

TIA

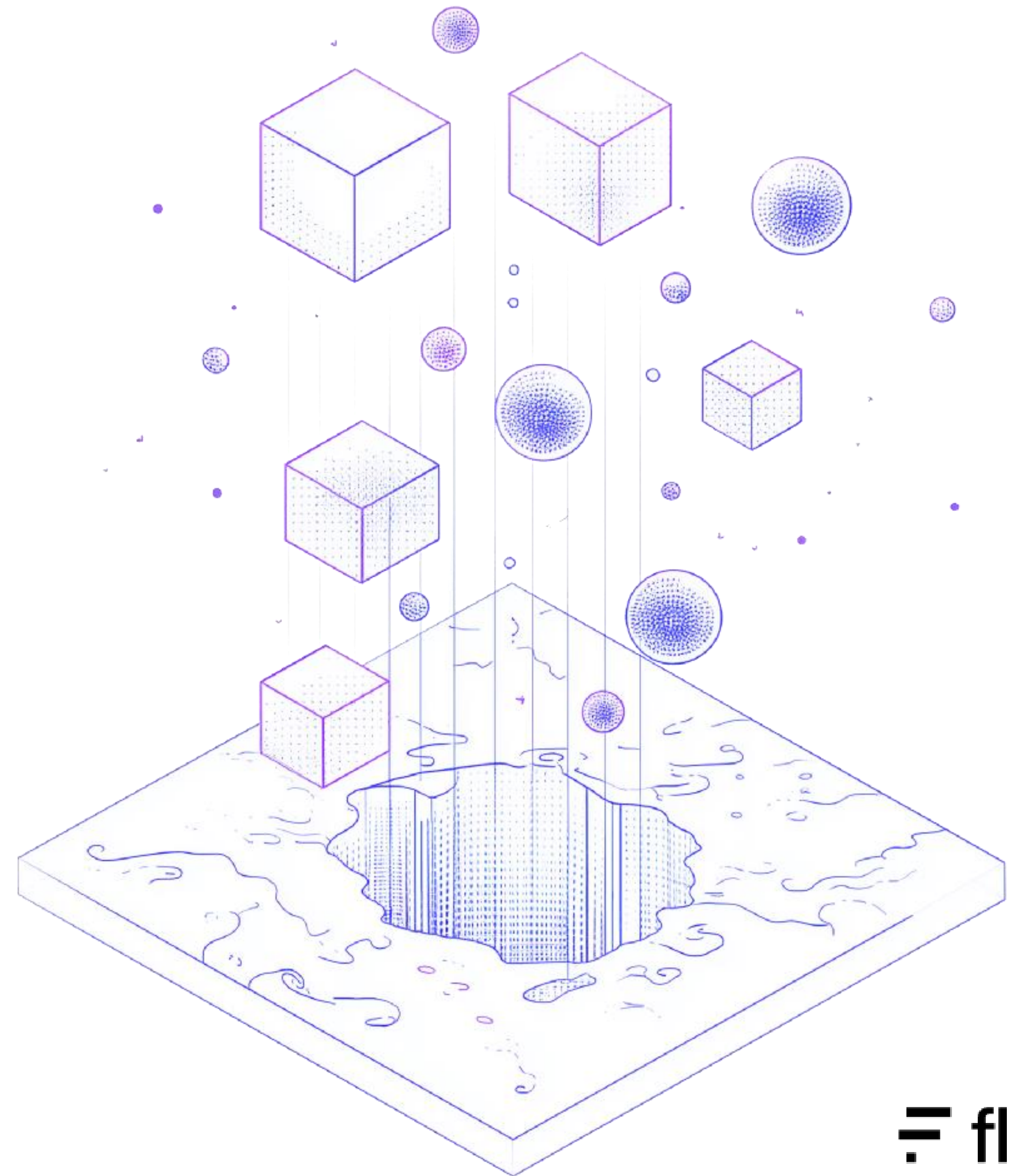
CSF

CEF

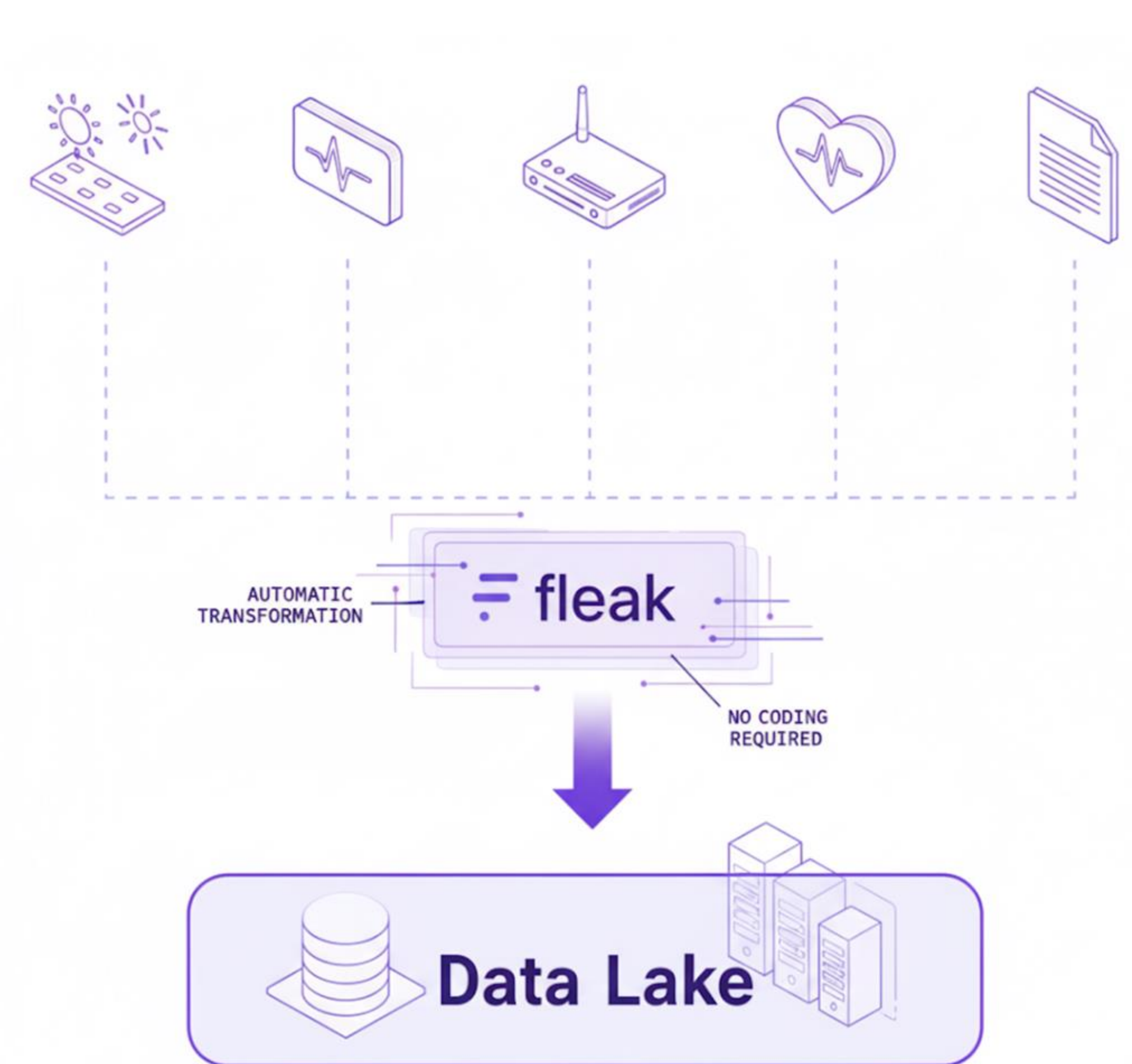
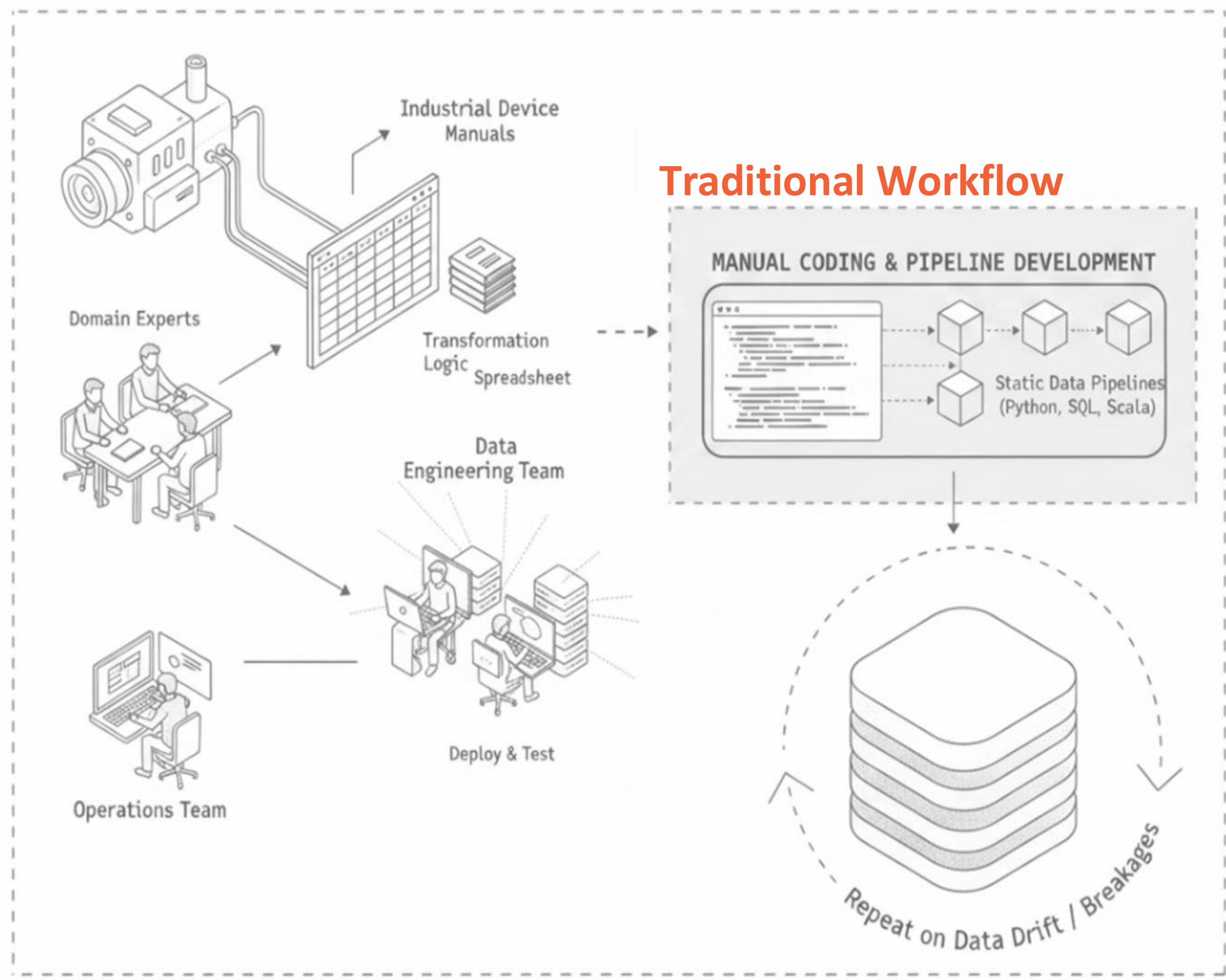
IEC

OT

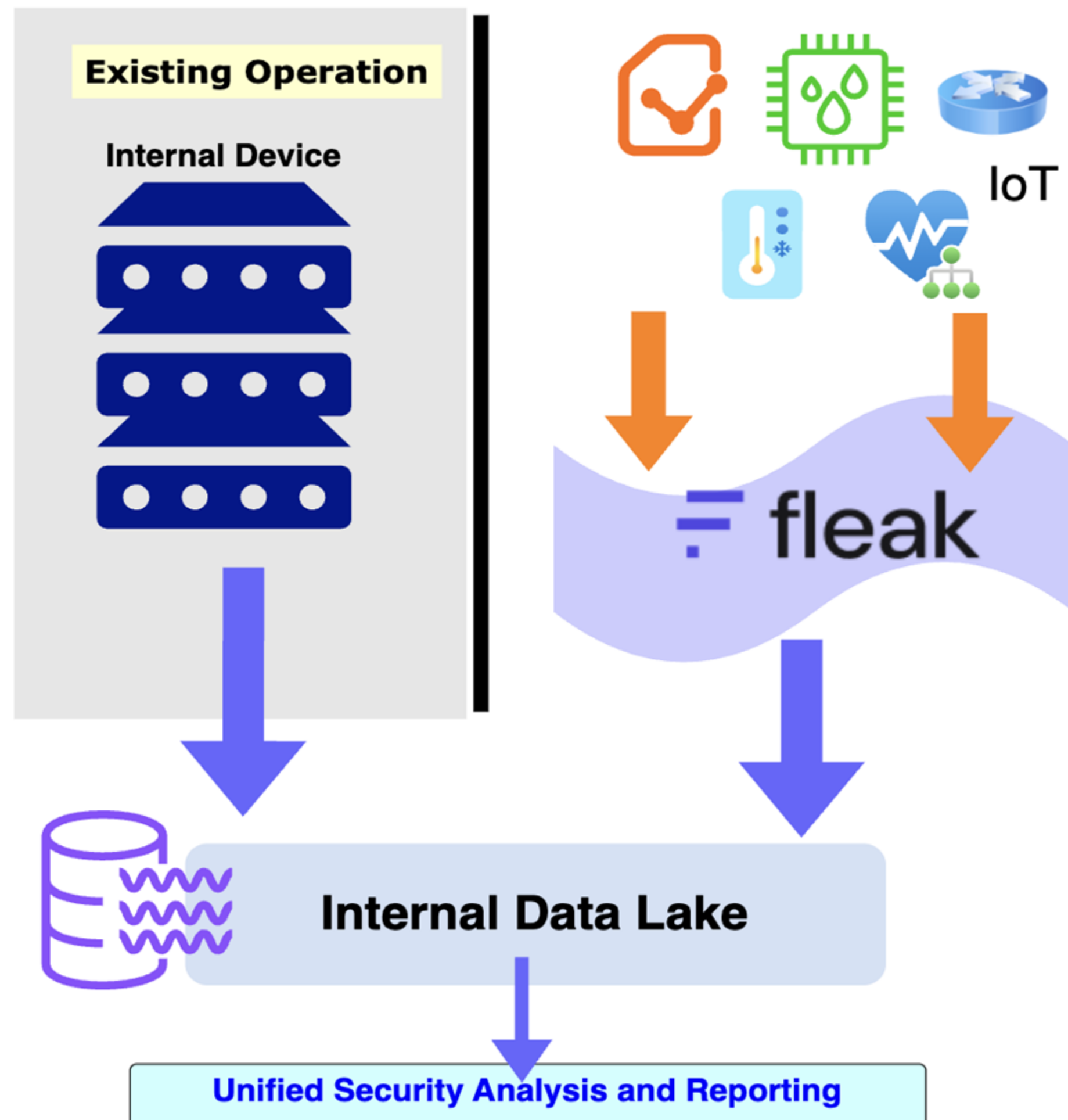
CUSTOM



# Traditional Data Flows VS AI Native Data Fabric



# Case Study: Driving Efficiency and Scale for a F500 Enterprise



 6 months/source - 1 week

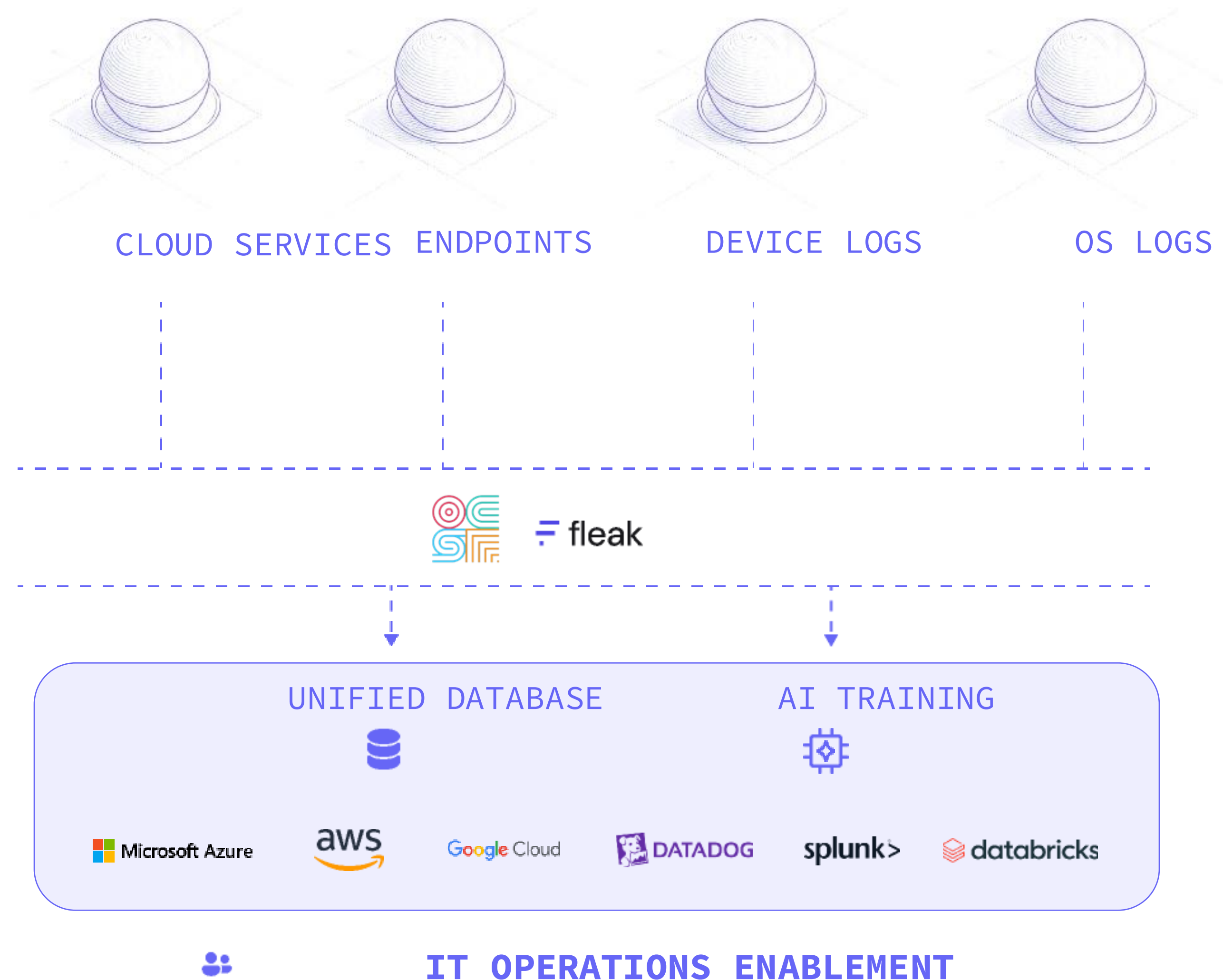
 90% cost reduction

 ONE gateway for ALL

integrations

# Where Does Fleak Operate in Production

- Between legacy infrastructure (Data Producer) and modern AI workloads (Data Consumer)
- Self-evolving data fabric (**in-motion**) that learns and adapts to changing business requirements
- Zero storage at millions EPS performance

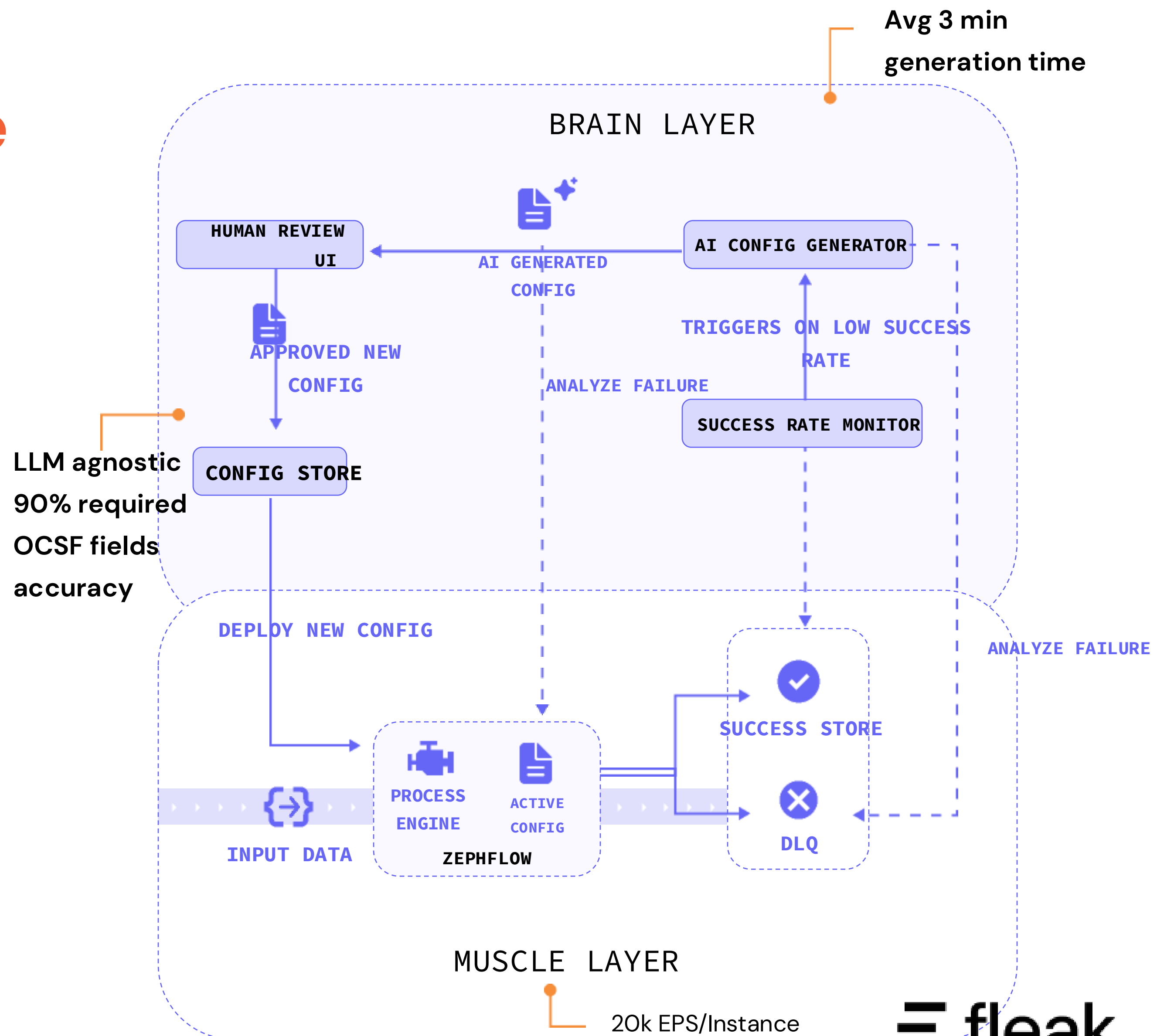


# The Self-Healing Architecture

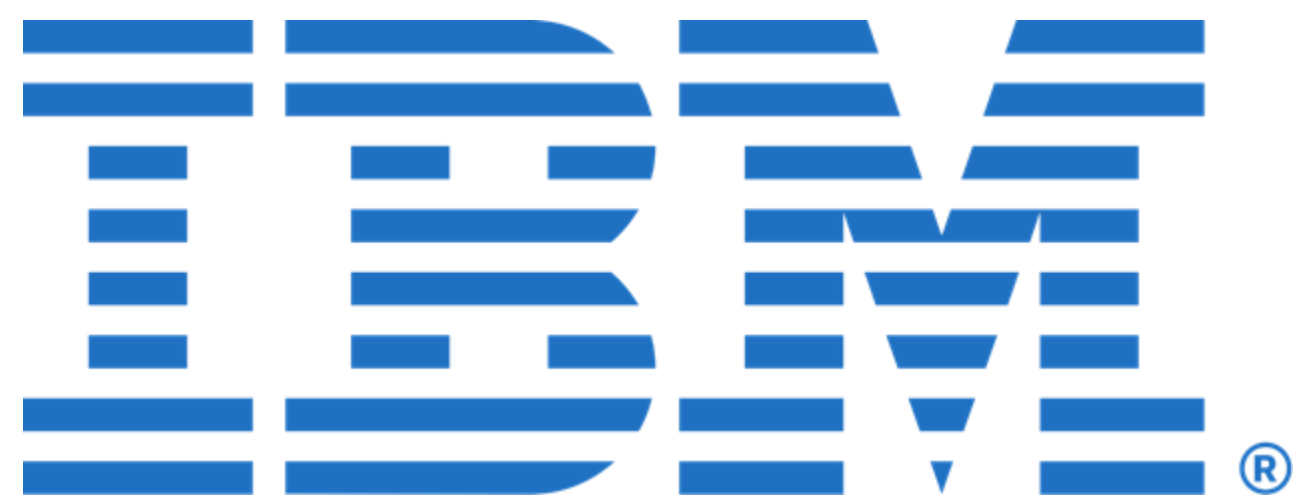
**Self-Improving AI for Unmatched Precision** →  
Every data point makes our AI smarter

**Beyond Mapping Intelligence** → Our brain layer can easily expand to full automation: Enrichment, Routing, and MORE...

**Air Gapped Deployment** → Data tagging and template generation at unprecedented speed within your own environment



# Proudly Partnering with



# demo

# Thank You

For Customized Industrial Translators,

Contact us at:

[contact@fleak.ai](mailto:contact@fleak.ai)



CLOSING KEYNOTE

---

Doug Warner

Head of Business Innovation



#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)



# The Human Algorithm:

How Leaders Orchestrate People and  
Technology to Build the Future

Doug Warner



**For the full deck, please email Doug at**  
**[warneryd@amazon.com](mailto:warneryd@amazon.com)**

# Thank you!

Closing Remarks



Clara de Ros

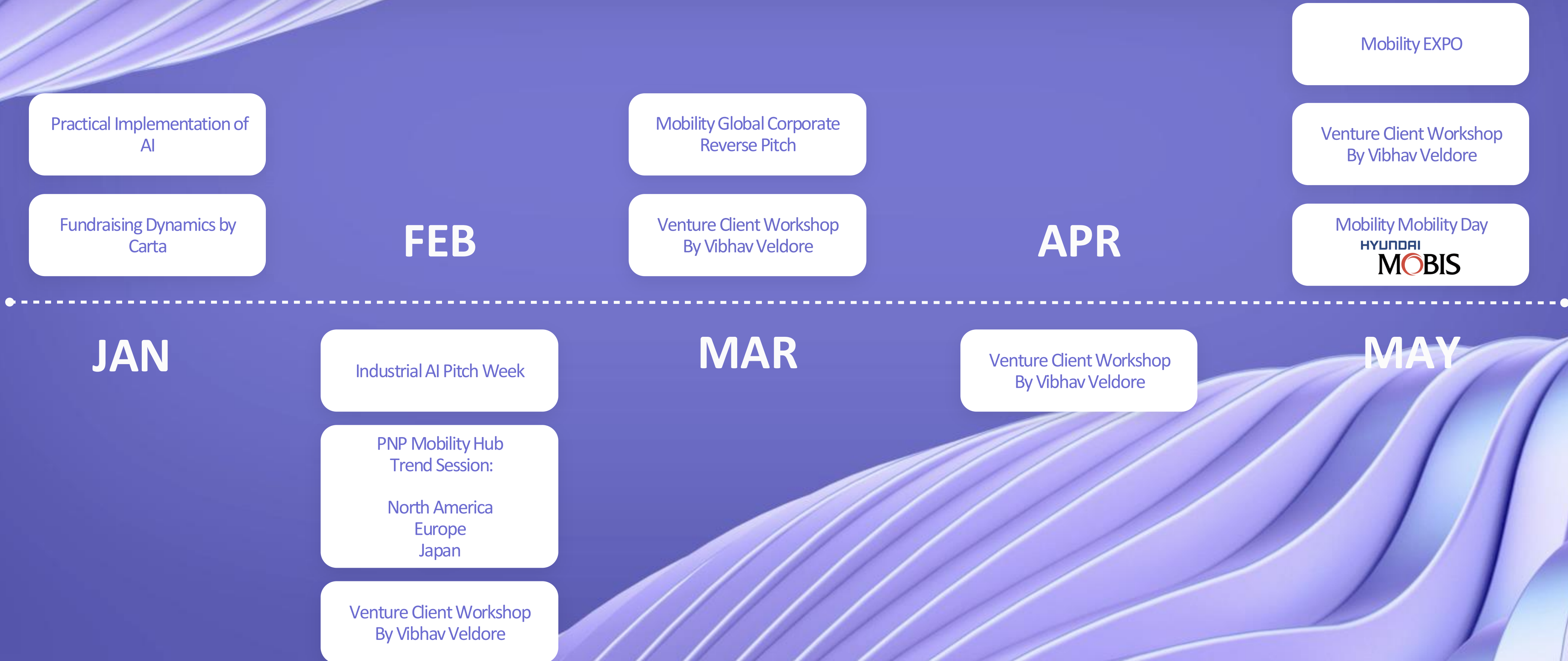
Senior Ventures Associate

**PLUGANDPLAY**

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)

## Looking ahead to 2026



## Plug and Play TEAM



Jacqueline Pham

Director



Aitana Hierro

Partner Success Manager



Sakura Grant

Partner Success Manager



Kishor Veerashekar

Senior Ventures Associate



Clara de Ros

Senior Ventures Associate



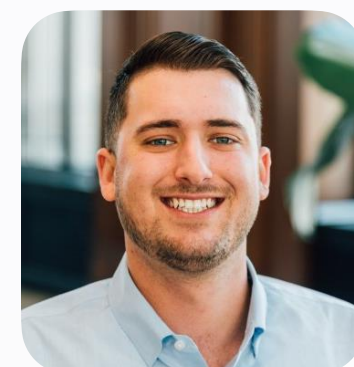
Vic Estrada

Partner Success Manager



Ava Milana

Partner Success Associate



Logan Azelton

Corporate Partnerships Manager



Kriti Goyal

Corporate Partnerships Associate

PLUGANDPLAY

Sv summit

THANK YOU  
FOR ATTENDING

#PNPTCSiliconValley

Join us at [pnptc.com](https://pnptc.com)