

# Edge-Enabled Machine Learning and AI

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*Chief Technology Officer*

- Nevan Hanumara co-founder and advisor (MIT Mech-E, PhD)
- Deep Academic, Industry, and Think Tank roots

# Problems Addressed with our Technology:

(IT + OT + Digital Twin + Domain Expertise = Industry 4.0)

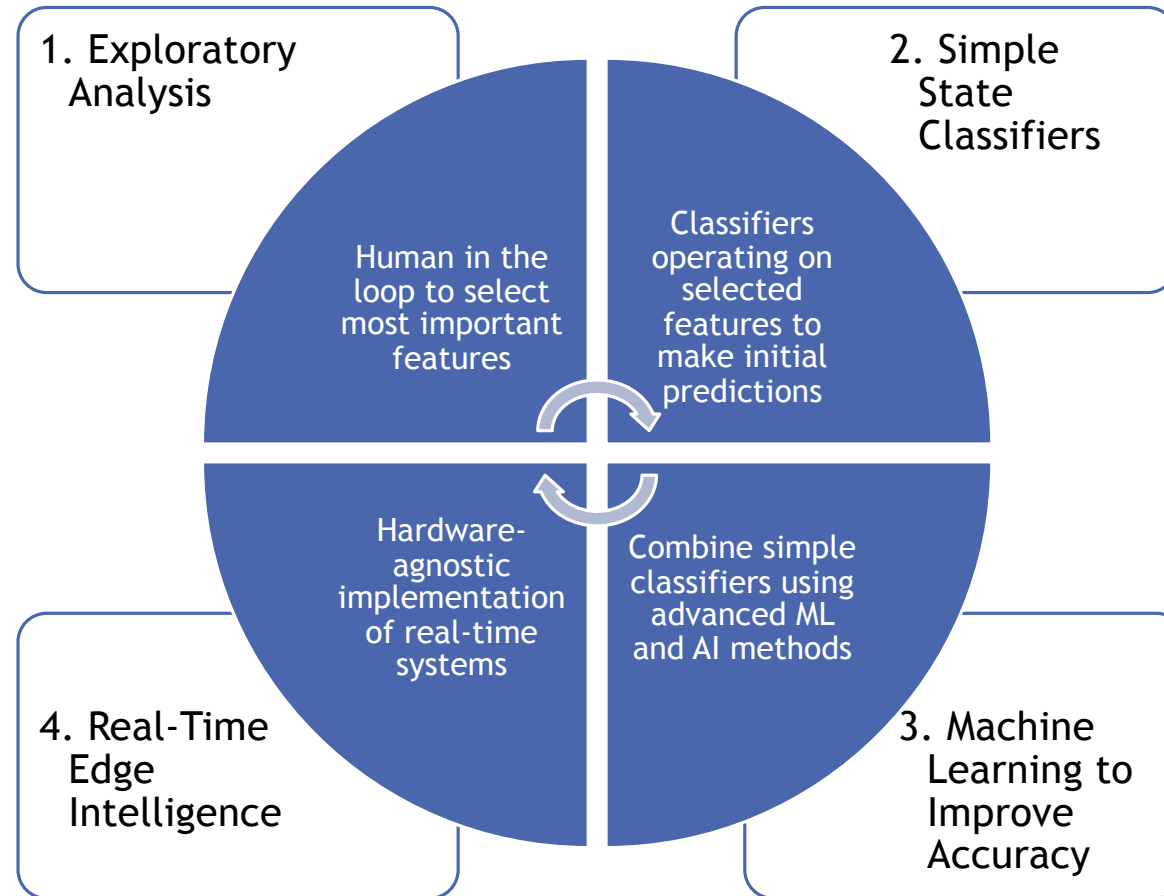
Lack of End to End solution for:

- ▶ ASSET EFFICIENCY AND UTILIZATION
- ▶ INTELLIGENT MAINTENANCE
- ▶ FAILURE PREVENTION
- ▶ MANUFACTURING QUALITY

**Optimizing these functions means  
bottom line cost savings in operations**

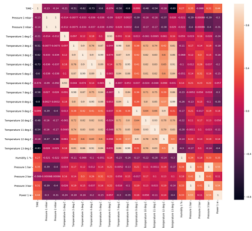


# Sensor Data Analysis Approach

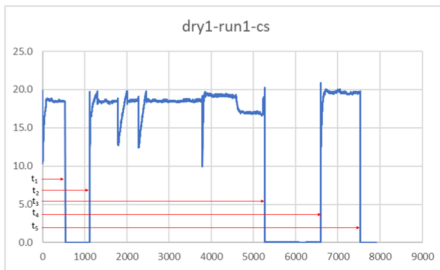


# Example from Fortune 500 Pharma Company

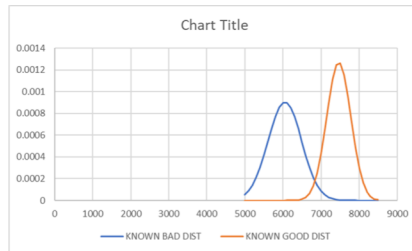
Raw data has no insights



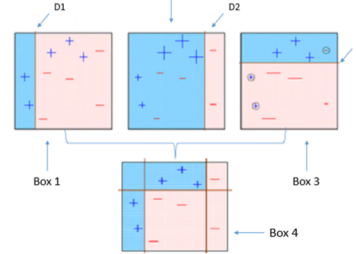
**FINAL RESULT:**  
Identified quality problems within the first 30 minutes of a 7-day production run!



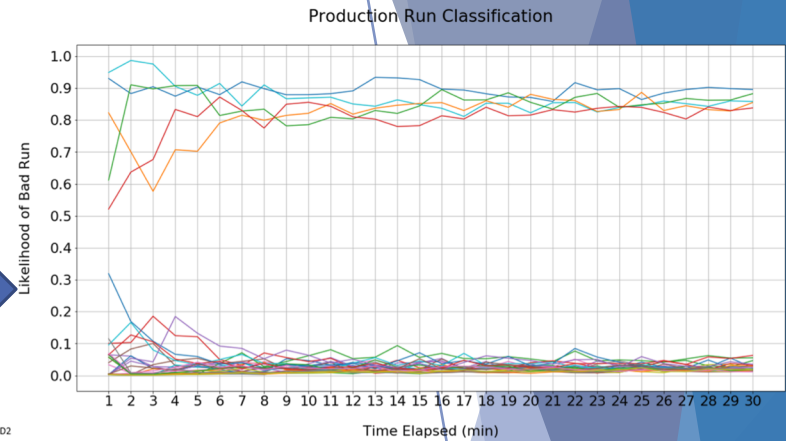
Apply Human Domain Expertise



Implement simple predictors of quality



Combine predictors using Machine Learning



## Partnership Ask:

- Med/Pharma/Biotech
- Automotive Manufacturing
- Aerospace & Defense
- Other industries with manufacturing

## Thank You!

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