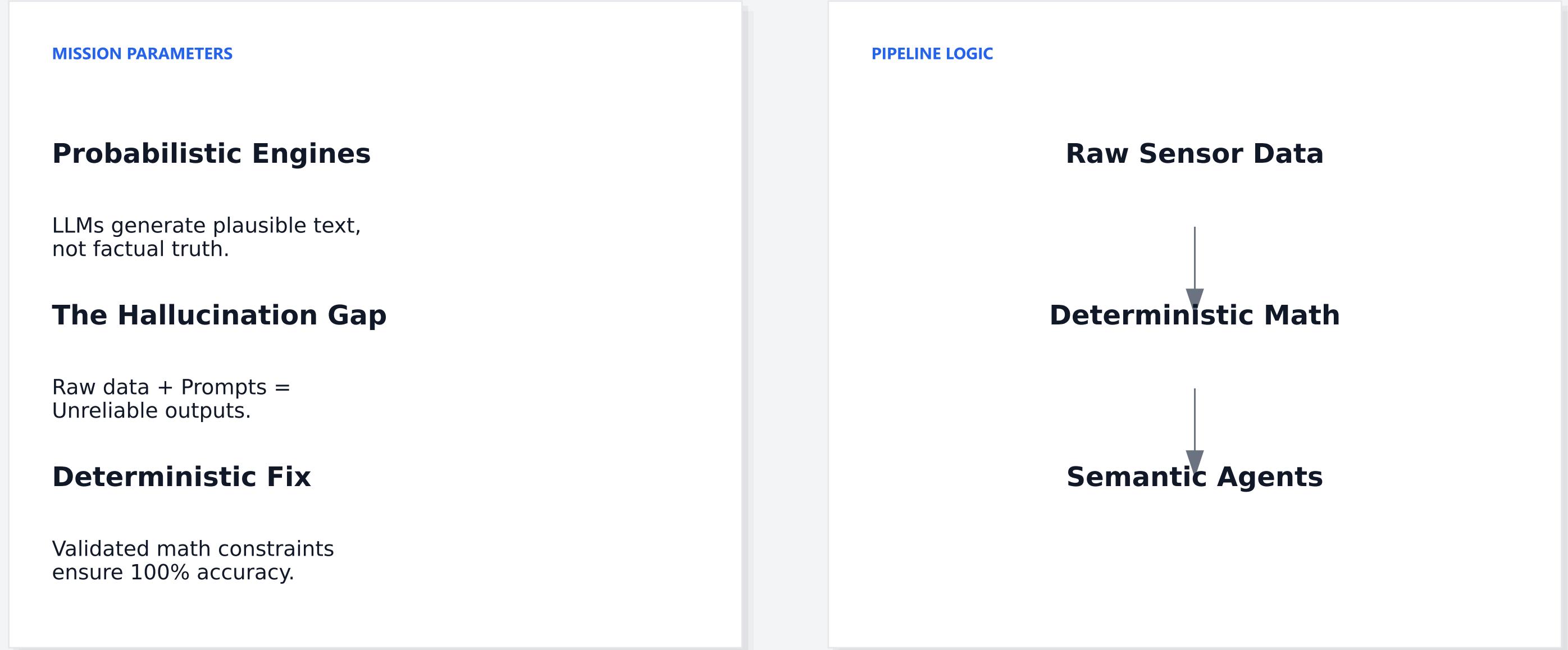


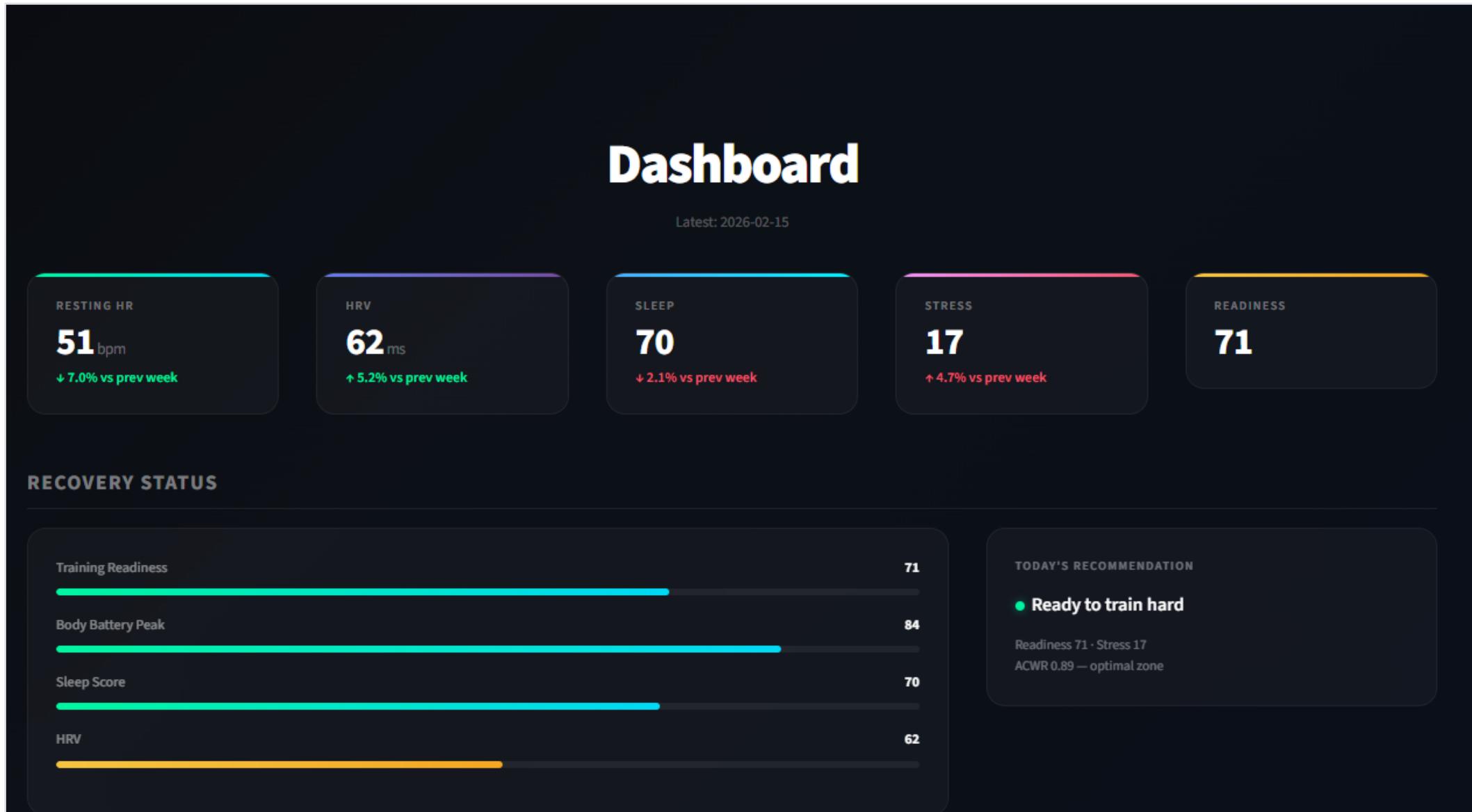
# **GARMIN HEALTH INTELLIGENCE**

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# SYSTEM ARCHITECTURE



# OPERATIONAL DASHBOARD



# CORE LOGIC

## Pearson Correlation

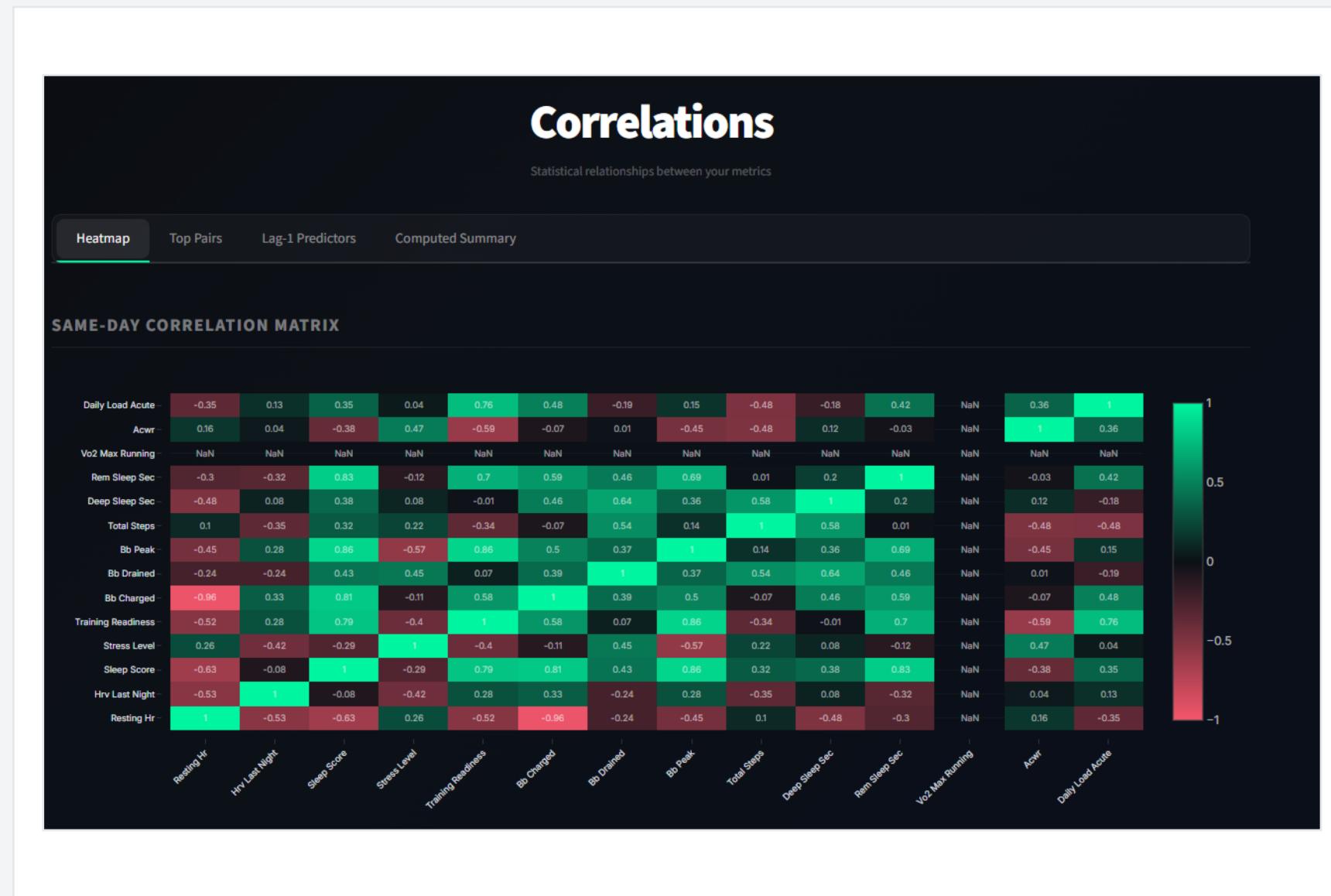
Detects linear relationships

## Markov Chains

## Predicts state transitions

## AR(1) Models

## Separates trend from noise



# MULTI-AGENT SYSTEM

## Agent Chat

Talk to 9 specialized AI agents — they have full database access + correlation data

Single Agent (fast)  Multi-Agent (comprehensive)

Single: one analyst answers quickly. Multi: dispatches to relevant specialists who work in parallel, then synthesizes their responses. Slower but deeper.

Example questions

how does my sleep affect my training ?

**HEALTH ANALYST**

Your sleep significantly impacts your training. Specifically, your sleep metrics from the previous day are strong positive predictors of your training acute load for the current day.

\* \*\*Training Sleep Score\*\* from yesterday predicts today's \*\*Training Acute Load\*\* with a very strong positive correlation of  $r=+0.996$  ( $p=0.0003$ ).  
\* Your overall \*\*Sleep Score\*\* from yesterday predicts today's \*\*Training Acute Load\*\* with a strong positive correlation of  $r=+0.989$  ( $p=0.0013$ ).  
\* \*\*Training Sleep Percentage\*\* from yesterday predicts today's \*\*Training Acute Load\*\* with a strong positive correlation of  $r=+0.976$  ( $p=0.0043$ ).  
\* \*\*REM Sleep Seconds\*\* from yesterday predicts today's \*\*Training Acute Load\*\* with a strong positive correlation of  $r=+0.974$  ( $p=0.0052$ ).

This indicates that better sleep quality and quantity (higher sleep scores, more REM sleep, higher sleep percentage) on one day are highly associated with a greater capacity for training acute load on the following day.

Clear chat

Ask anything about your health data... ↑

# SIGNAL ANALYSIS

