



AI in Formula One.

Exploring Use Cases For

ERS & Electronics

Engineers

This content is an independent discussion of AI in motorsports engineering and is not affiliated with Formula One, FIA, or any specific team.

Maximising Hybrid Power Efficiency & Reliability

Why It Matters

Energy Recovery Systems (ERS) plays a critical role in on-track power and performance. But energy deployment must be carefully managed to avoid overuse and ensure the right power is available at key moments.

AI helps teams optimise energy deployment strategies while maintaining system reliability.

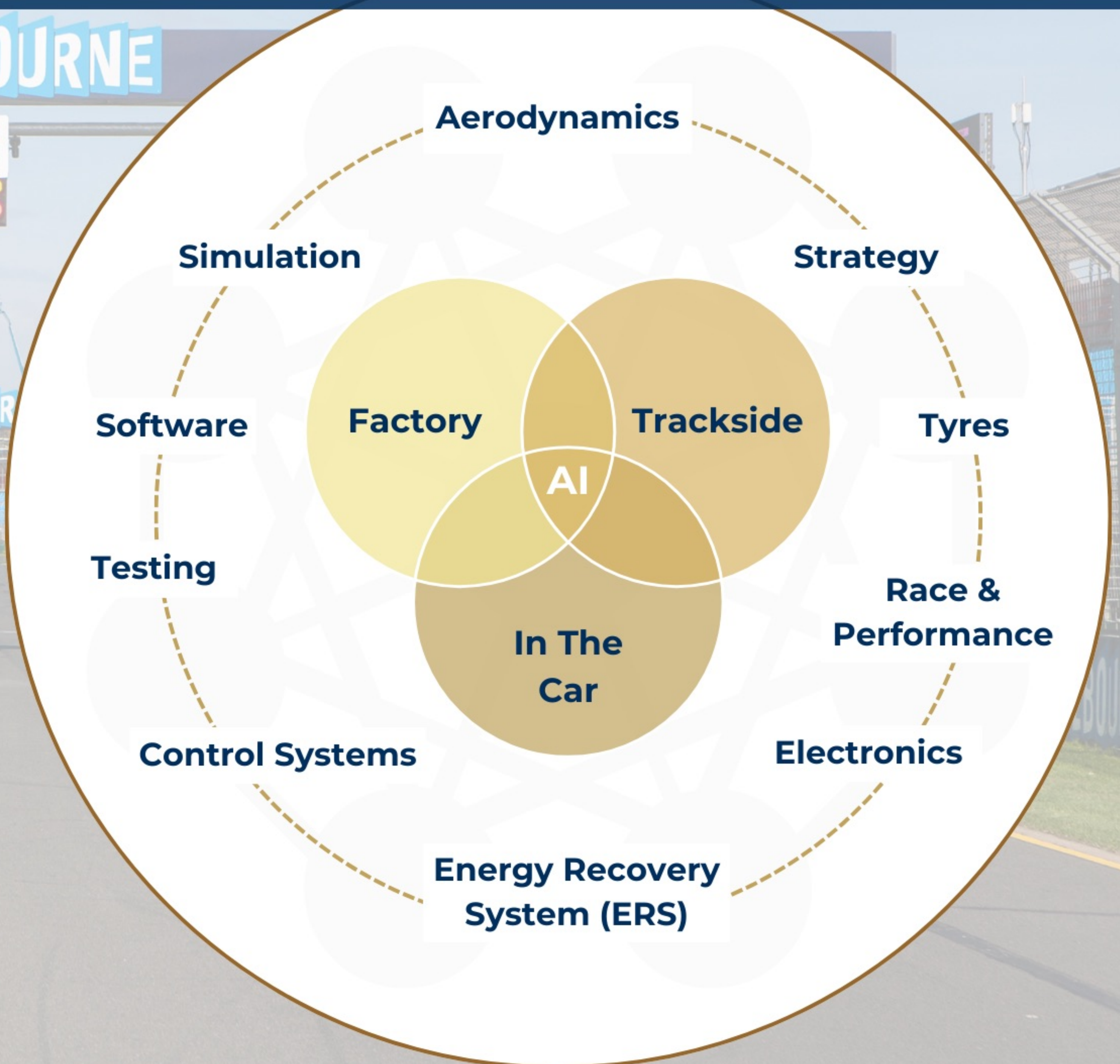
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AI-based Engineering Technology

- ✓ Optimises ERS energy deployment based on live telemetry.
- ✓ Predicts State of Charge (SoC) trends to avoid over-depleting energy reserves.
- ✓ Identifies potential faults in hybrid power components before failures occur.

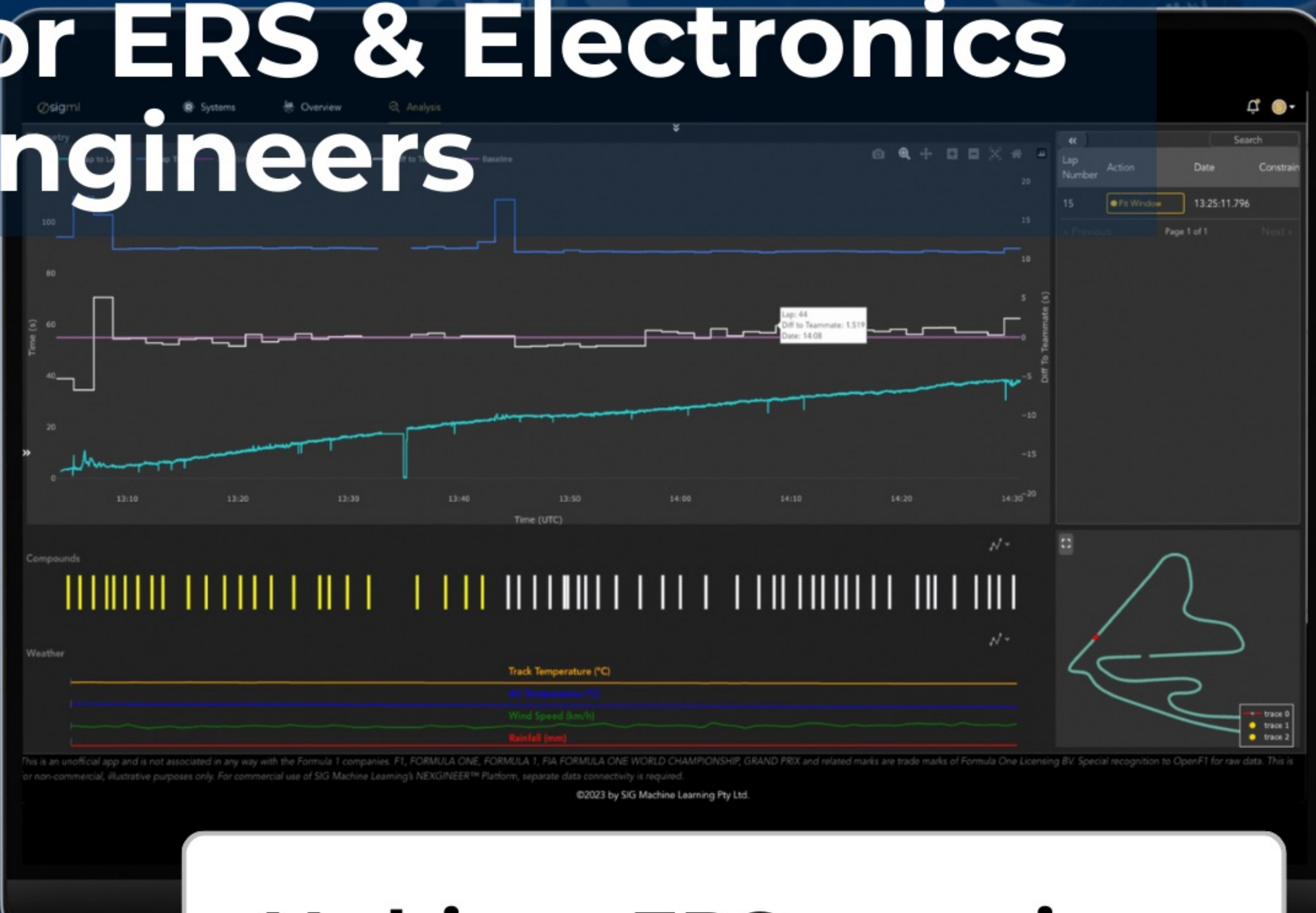
The Future of Racing: Streamlined with AI.



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Potential Applications for ERS & Electronics Engineers

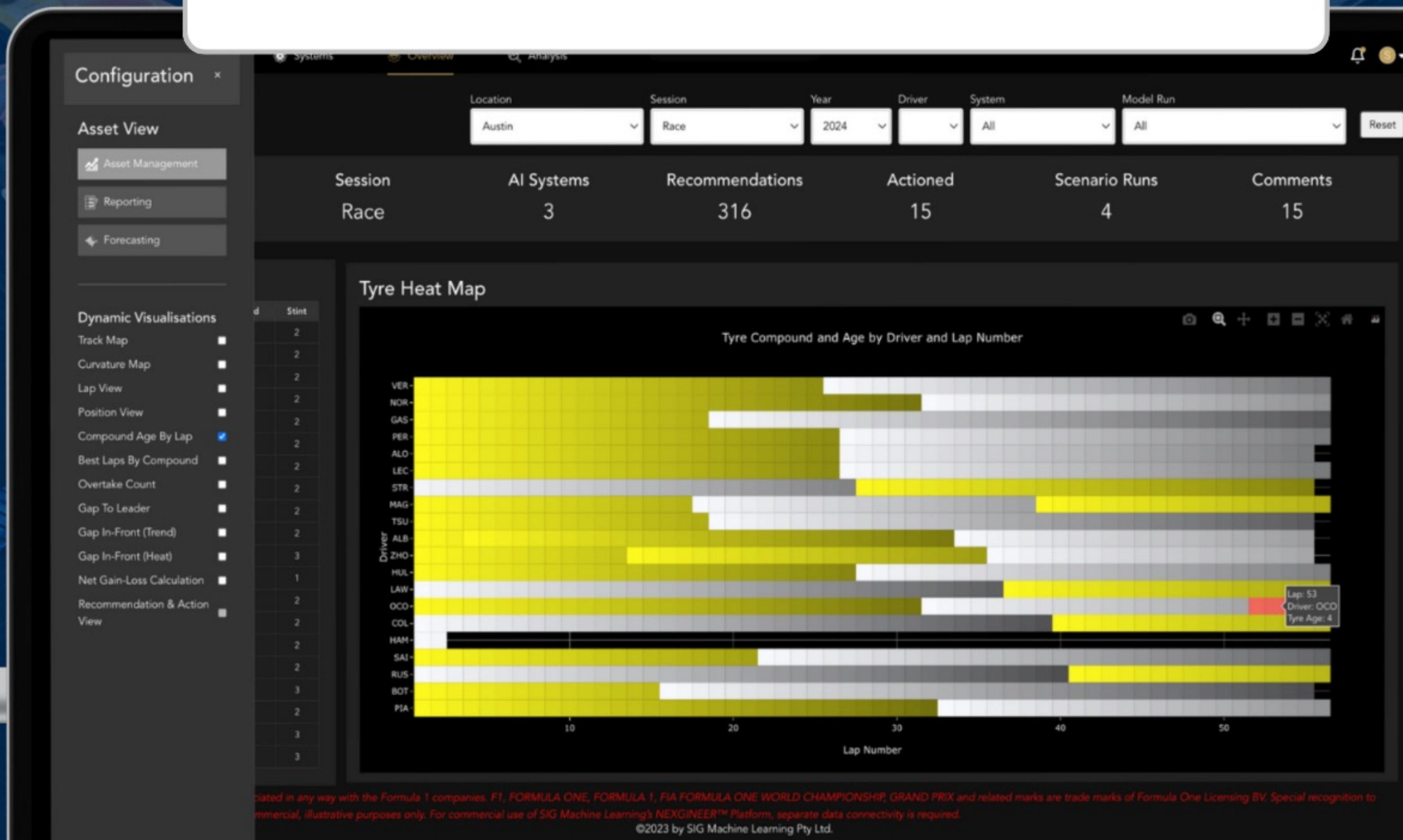


AI-driven ERS mapping

Determine the best deployment strategy for different track sections.

Thermal load optimisation

Predict overheating risks and suggests cooling strategies.



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ERS reliability modelling

Identify early warning signs of ERS component wear.

AI isn't replacing expertise - it's enhancing it.

To discuss one or more of these
AI use cases, contact us today.



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