



AI in Formula One.

Exploring Use Cases For

Tyre Engineers

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

Predicting Wear, Stint Optimisation & Crossover Points

Why It Matters

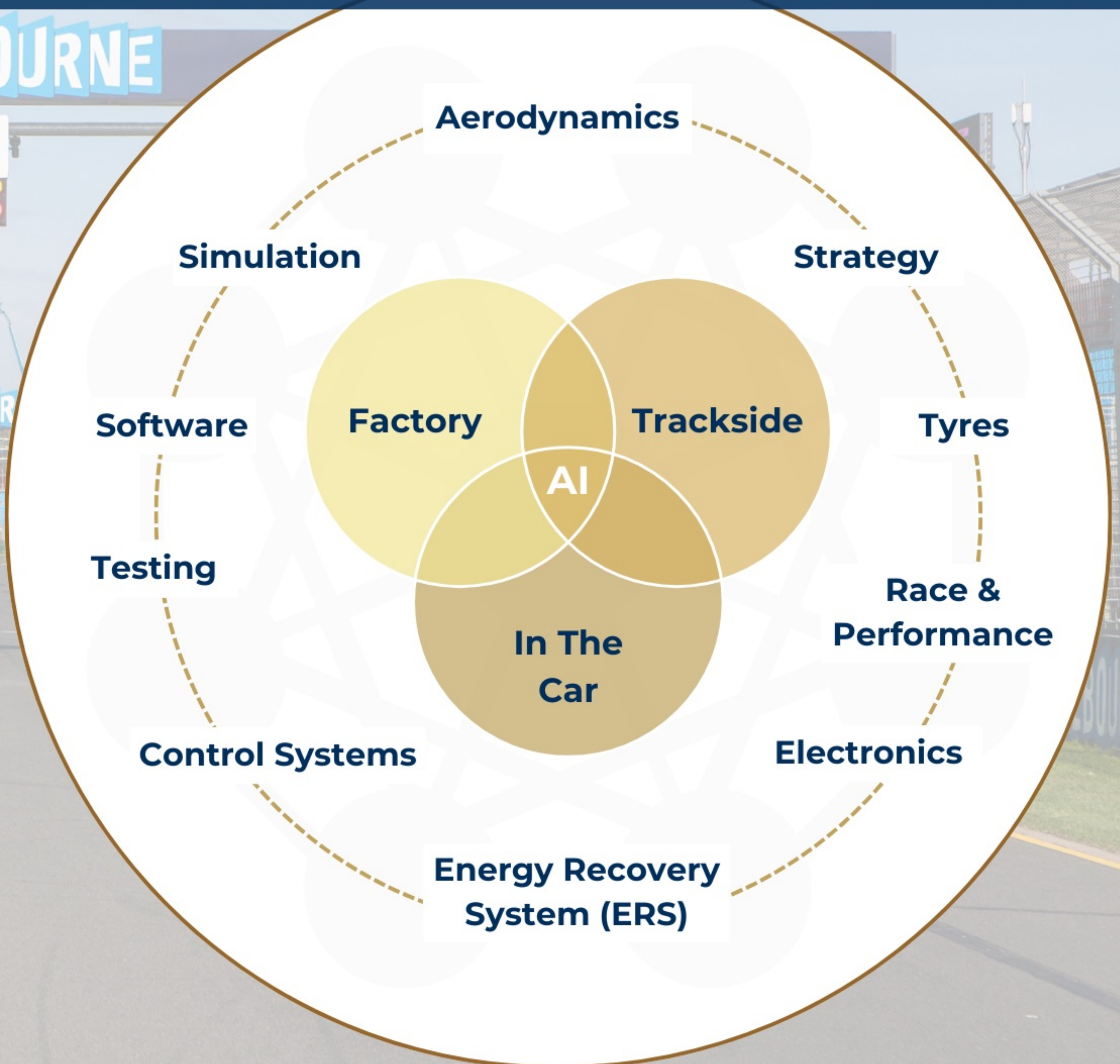
Tyre performance is one of the biggest factors in race strategy and car performance.

AI enables teams to predict tyre degradation, optimise stint lengths, and adjust strategies based on real-time conditions.

AI-based Engineering Technology

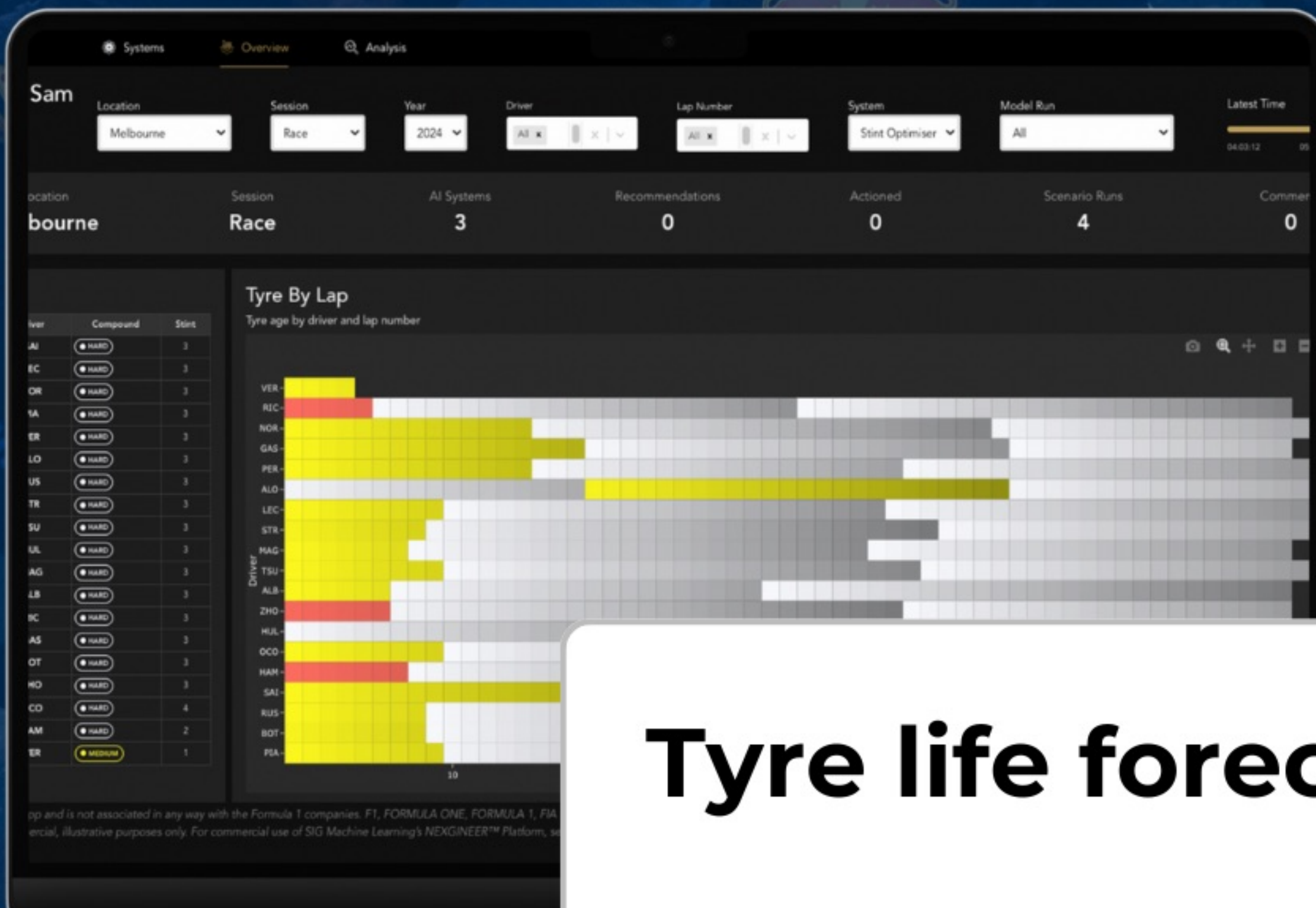
- ✓ Predicts tyre degradation trends based on track conditions and driver behaviour.
- ✓ Determines optimal tyre compound selection for each race.
- ✓ Calculates crossover points for slicks vs. intermediates in evolving, wet conditions.

The Future of Racing: Streamlined with AI.



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Potential Applications for Tyre Engineers



Tyre life forecasting

AI models predict when tyres will begin to fall off the curve.

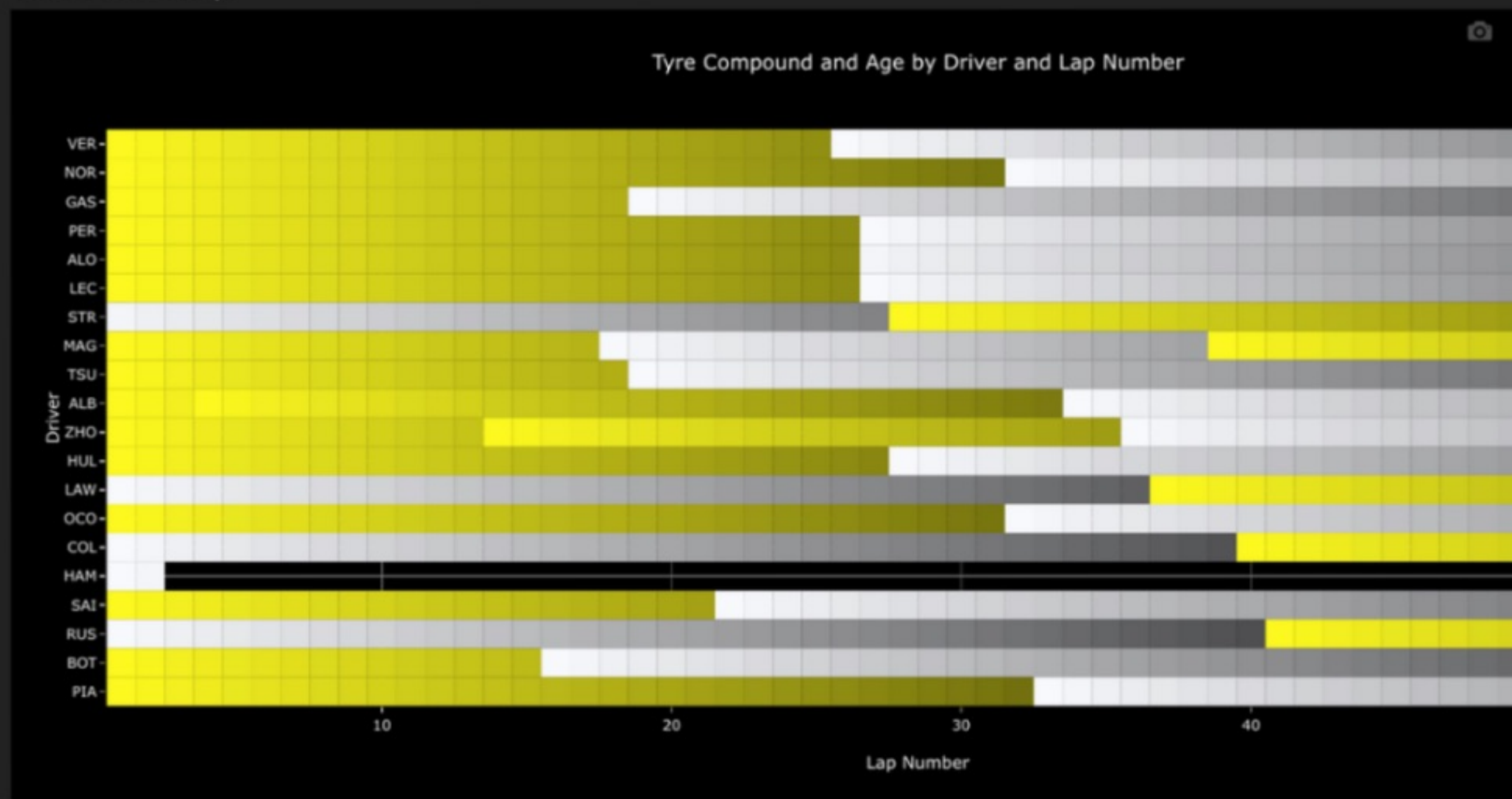
Weather-dependent strategy modelling

Predict overheating risks and suggests cooling strategies.

Driver	System	Model Run
▼	▼ All	▼ All
Actioned		Scenario Runs
15		4

Race 3 316

Tyre Heat Map



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Tyre warm-up & cooling optimisation

Predicts how tyres will behave under different track temperatures.

Next Steps



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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