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Realism at Scale.

Autonomous Vehicle and ADAS Simulation Platform, Driven by AI

Time, cost, and safety make real-world training and testing of ADAS and Autonomous Driving impossible. Cognata's commercially-deployed platform leverages cutting-edge AI on the cloud to provide realism, at scale.

Use Cases

Helping solve some of the industry's biggest challenges

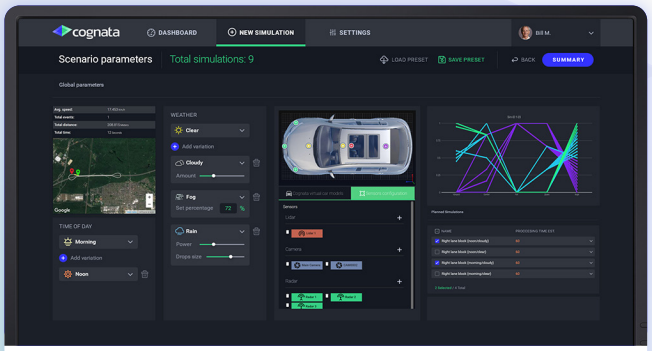
Creating accurate models of the fisheye cameras needed for perception in today's automated parking systems

Populating virtual worlds with the realistic traffic behavior needed to effectively train and test prediction in challenging highway automation scenarios

Delivering diverse libraries of accurate synthetic assets at scale to enrich training data and accelerate AI learning

Our Solutions

AI-based simulation and validation for Autonomous Driving and ADAS across the full product life cycle



Simulation Platform

Training

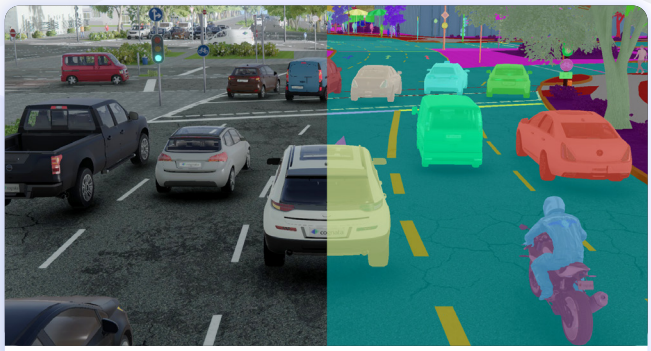
- Realistic 3D environments
- Behaviorally-realistic agents

Validation

- Ready-to-use scenarios
- Scenario Authoring and Management

Analysis

- Insights
- Visualizations



Datasets

Accuracy:

- Industry-leading realism with pixel-perfect annotation

Diversity:

- Weather, lighting, surface, and object variation across global scenes

Scale:

- Cloud architecture for quick and cost-effective creation and delivery

Our Technology

Underlying Cognata's offering are four layers of technology:

Static Layer

A digital twin of the world. 3D environment of roads, buildings, and infrastructure, accurate and geo-specific to the last lane marking, surface material, and traffic light

Dynamic Layer

Population of the virtual world with drivers, pedestrians, and cyclists, replicating geo-specific behaviors

Sensing Layer

Exact behaviors of vehicle sensors, including cameras, radar and LiDar, based on deep neural network modeling

Cloud Layer

An elastic architecture to test millions of miles and thousands of scenarios, combining road types, lighting, weather, and traffic conditions

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