How Simulation Accelerates Self-Driving Technology

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### Aimotive - The Company at a Glance

**COMPANY**
- Founded in 2015 by CEO Laszlo Kishonti
- Incorporated in Germany, headquartered in Budapest

**GLOBAL GROWTH**
- 4 offices across 3 continents: Budapest, Helsinki, Mountain View and Tokyo
- 4 licensed testing locations: Hungary, Finland, California, Nevada
- Autonomous driving test cars from 4 manufacturers: Toyota, Volvo, Citroen, SAIC

**TEAM & EXPERTISE**
- 190+ passionate team, including 150+ highly skilled engineers
- In-house developed AI algorithms and framework
- 10+ years in high-performance embedded programming

**STRONG TRACTION**
- Strong track record of delivering customer projects since 2015
- Running autonomous driving projects across 3 continents (Europe, USA, Asia)

**INVESTORS**
- Over $50 million raised
- Robert Bosch VC, Nvidia, Inventure VC, Draper Associates, B Capital, Prime Ventures, Cisco Investments, Samsung Catalyst Fund, Day One Capital, Private investors
Our Autonomous Driving Technologies

aiDrive
Self-driving Software Platform
Artificial Intelligence-based software suite for Level 4 and 5 autonomous driving

aiSim
Virtual Simulation Environment
Photorealistic and dynamic virtual environment for AI training and system testing

aiWare
AI-Optimized Hardware Platform
NN accelerator IP for low-power, high-performance AI-optimized computing
Our L4 Solutions

Autonomous Valet Parking  
Highway Autopilot  
Urban Driving

Aimotive works with its partners around the world to bring safe and scalable autonomous driving experience to the market.

Deployed with aiDrive  
 Tested in aiSim  
 Ready for aiWare
aiSim: The Simulator for Autonomous Vehicle Development

OVERVIEW

• Designed to accelerate autonomous vehicle development
• Recreated real-world situations and new unique scenarios for safe development
• Fully integrates into aiDrive allowing for SiL and HiL testing
• Supports artificial intelligence research and training with ground truth data

USE CASES

• Scenario testing: based on hundreds of unique safety test cases
• Permutable with location, weather, traffic, time of day
• Modular Verification: with ground truth sensor data or model-space data
• Data generation: instance segmentation, bounding box, depth, point clouds

TEST SETUP & RESULTS

• Real-time bidirectional connection of aiDrive and aiSim
• Dedicated servers for nightly and pre-commit tests
• Automated report generation with videos showing the vehicle’s behavior in the simulated environment
• Integrated with ALM tool for requirement management and traceability
Our Development Pipeline Solves for Speed and Safety

[Diagram showing the pipeline with stages such as New Function, Operation Domain+Use-case, Requirement definition, Scenarios, Algorithms, Real and Augmented Training Data, Test Cases, aiDrive, Vehicle Testing, and New Software Release. The process involves iterative test-driven development and closed loop validation.]