



Software solutions and services to power autonomy



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Agenda

- 1. Trends and challenges
- 2. Company overview
- 3. Solutions overview
- 4. Our customers
- **5.** Key takeaways
- 6. Q&A

Key ADS inflection events



GPU processing efficiency

Nvidia's main GPUs showing changes in transistor density over the years demonstrates drastic improvements post-2010.



Machine learning advancements

Research for ResNets for object detection (2016) GANs & generative models (2014)

Large advancements in point cloud detection with PointPillars (2018)

Double Q Learning made massive progress in reinforcement learning (2016)



Tesla and the car-as-computer

Tesla commercializing AVs through Autopilot and OTA updates has created large pressure in the ecosystem for automotive companies.

Growing number of applications



Automotive



Construction



Agriculture



Trucking





Autonomous mobile robots

Aerial

Every autonomous deployment needs some critical components



What's changing now

1

More virtual development

Software is eating the vehicle; simulation is eating ADS software development

2

Data bottlenecks are improving

Creative approaches around gathering data, using synthetic data, and needing less data

3

Ecosystem of suppliers

An ADS project starting today can use more off-the-shelf hardware, tools, and services

4

Spring season

Emerging from a mild ADS winter; recent deployments driving optimism

5

4th wave of ADS companies

New wave of founders with domain experience trying new technical approaches and different ODDs 6

ADS investment still fluctuating

Investor sentiment fluctuates as technology progresses and macro environment changes

Anything that moves will be autonomous.





The foremost enabler of autonomous systems development



Products to support the autonomous system development cycle



Simulation tools

Simulation software used by engineers developing for autonomy

Data products

Cloud software for managing autonomous system data, maps, and analytics

Software modules and HMI

Autonomy modules and stacks to support human operators and build trust in autonomous systems

Simulation



Data





Software modules and HMI



Our public customers



"We use the most powerful and flexible simulation platforms in the self-driving industry."



"[Applied Intuition's] impressive and modern technology stack brought us in, and their professionalism, passion, and attention to details made us stay."



"Applied Intuition works hand in hand with our engineering teams to integrate their tools with our quite complex codebase"



"We believe Applied Intuition will be a strong long-term partner in developing premiere simulation tools for the emerging AAM market."



"Highly advanced simulation speeds up our ability to deliver next generation AMRs best equipped to address the unpredictable events in facility workflows."



Let's power autonomy together





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