HCLTech | Supercharging Progress™

Autonomous
Vehicle Services

Accelerating the development and
deployment of autonomous vehicle programs

The autonomous vehicle (AV) revolution promises not only safer and more efficient roadways but also a complete transformation of how we live, work and play. In addition to massive production software expertise and computational prowess, OEMs and Tier 1 manufacturers require advanced technology solutions that can support the development of innovative autonomous vehicle use cases and business models.

Automotive companies require technology solutions that can continuously evolve and assist them in remaining innovative and competitive in the autonomous vehicle market.

Driving into the autonomous future

With over two decades of experience in the automotive industry, HCLTech has been powering safety technologies in over a million vehicles globally. Our technology solutions help automotive OEMs and suppliers accelerate the development and deployment of technologies for autonomous vehicles.

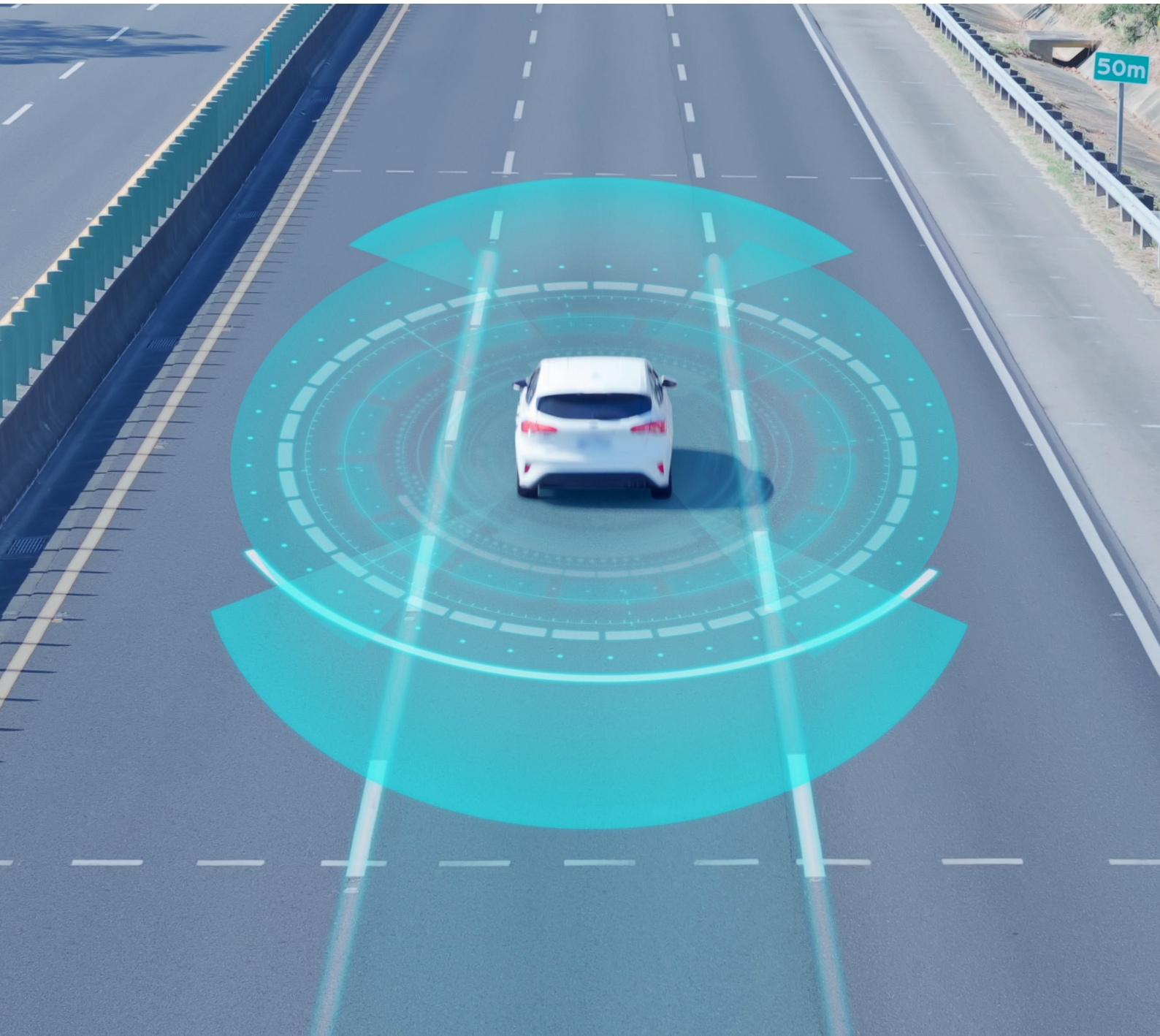| **20+** Years of ADAS product engineering experience	**5** Global OEMs as end customers	**6** Top Tier-1s as customers	**35+** Product lines supported

Our service offerings

Designed to offer end-to-end services from concept to production to sustenance support for ADAS / Autonomous programs, our offerings combine HCLTech's over two decades of experience in ADAS, next-generation technologies, solution accelerators and cross-functional expertise to help automotive companies bring innovative solutions and products to the market faster.

Algorithm Development

Software developed as a service

- Sensor perception software
- Control intelligence software

Virtual Simulation

Simulation as a service

- Sensor fusion
- Localization
- High-precision maps
- GPS
- Real-world data simulation at test bench and lab levels

Testing

Validation as a service

- Unit testing
- Integration testing
- Black-box testing
- Simulation testing
- SIL Testing
- MIL Testing
- HIL Testing

Training

Annotation as a service

- Data annotation for algorithm
- Data annotation for testing

Our investments and innovations

| Driver monitoring | Front camera | Rear camera | Front stereo vision | Lane departure control |

Level 3 autonomous car

			Driver authorization	Traffic sign recognition
			Surround view system	Video annotation automation
			Drivable path setection	Atomated trailer angle detection
Pedestrian detection	Blind spot detection	Face detection	Automatic high beam controller	Blockage detection for camera

Autonomous center of excellence

Diverse and experienced multi-disciplinary talent covering software, hardware, mechanical and testing

Next-generation lab and testing infrastructure

- HIL lab
- Imaging lab
- EMI/EMC lab
- Industrial design lab

Customer success stories

HCLTech has partnered with leading automotive companies around the world in implementing multiple ADAS programs to improve their time to market, quality and productivity.

Facilitated level-3 autonomous functionality with stereo vision systems for European tier-1 supplier

Development and testing of software for ADAS systems for global OEM

Modeling and testing of ADAS feature in visual simulation for US-based OEM

Verification and validation of ADAS features for global OEM

Enhancement of production and testing-ready Autonomous Vehicle Software compliant with European regulations for Europen OEM

Development and testing of ADAS Automation tool for global OEM

Discover how you can supercharge the future of mobility with HCLTech.
For more information, write to: AUTO_BSG@hcl.com

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HCLTech is a global technology company, home to 222,000+ people across 60 countries, delivering industry-leading capabilities centered around Digital, Engeneering and Cloud powered by a broad portfolio of technology services and software. The company generated consolidated revenues of $12.3 billion over the 12 months ended December 2022. To learn how we can supercharge progress for you, visit hcltech.com.