# CYIENT





Contemporary electronic devices are omnipresent, with embedded systems serving as the foundational technology. Seize the opportunities presented by the next wave of embedded computing, enriched with innate intelligence. Cyient is the ideal partner to swiftly introduce efficient and secure solutions, ensuring a rapid time-to-market.

#### **Powering the Embedded Value Chain**

# **Key Services/Offerings**

### **Autonomy (Robotics)**

- · Sensor Handling
- · Control Algorithm
- Integration and Validation
- Model Based software design
- ISO 26262 Functional Safety Analysis
- Certification Support

### Simulation & Analysis

- HMI & Configuration Development
- Web Based GUI development
- Cross-Platform GUI Development
- Multi- Language support/ localization
- Porting & re-engineering of the HMI/GUI
- Maintenance & enhancement
- V&V & automated GUI Testing

### **Verification & Test**

- Functional validation
- OTS/COTS Verification
- System Reliability Analysis
- · Regulatory compliance
- Software & Hardware testing
- ECU Functional Testing
- Test Automation

# **Embedded Software Development**

- · Firmware Development
- OS & Middleware Development
- Embedded App Development
- Migration activity
- · Software integration
- Hardware & software integration

### **Control Systems**

- Controller firmware development
- Embedded OS
- Full SDLC & Software migration
- Model-based development
- Manual code in C/C++/ADA

### Fostering Imagination. Enabling Innovation

As a global trusted partner in the Off-Highway domain, we have delivered comprehensive solutions across our clients' value chain. Our solutions are agile, innovative, and give businesses a much-needed competitive edge.

Below are a few case references we have delivered:

## **Conscious Perception System for a Construction Vehicle**

- Converted a manual vehicle into an autonomous vehicle for a European vehicle manufacturer, Integrated AI outcomes with vehicle electronics to control vehicle in future
- 360-degree view of the vehicle in all weather conditions, Alert operator for all hazard conditions and improve efficiency & reduce operational costs

### **ADAS-Advanced Driver Assistance Systems**

- Developed near range cameras and ultra sonic projects
- Tested functionality of hydraulic hitch of the tractor towards retract, extend or neutral positions and JD display specifications

The Cyient Edge With a decade of experience in the Industry, Cyient employs pragmatic, flexible, and innovative strategies to meet our client's business requirements. We shape trends for successful products and services in a connected Off-Highway industry by supporting the entire value chain through the Design, Build, and Maintain stages. Working in close collaboration with clients & leveraging our Mining domain knowledge we co-innovate to design and optimize future-ready solutions.

Cyient (Estd: 1991, NSE: CYIENT) is a global Digital, Engineering and Technology solutions company. We collaborate with our customers to design digital enterprises, build intelligent products and platforms and solve sustainability challenges. We are committed to designing tomorrow together with our stakeholders and being a culturally inclusive, socially responsible, and environmentally sustainable organization.

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