Roade Labs AI & ML Service

Empower the future with intelligent AI algorithms and machine learning expertise from Roade Labs. Roade Labs team of experts provides comprehensive services to enhance business efficiency and competitiveness.

Roade Labs AI & ML Services:

1. Machine Learning: Applied in image and speech recognition, finance, and automotive industries.
2. Natural Language Processing (NLP): Used in chatbots, automated translations, and speech recognition technologies.
3. Expert Systems: Applied in image and speech recognition, finance, and automotive industries.
4. Speech Recognition: Utilized in home automation, automotive industries, and phone systems.

Services Offered in AI and ML:

1. Data modeling and predictive analysis using AI and ML.
2. Consultation on AI and ML strategy implementation.
3. Customized and scalable ML solutions for enterprises.
4. Development of natural language processing chatbots.

Industry Case Studies for Roade Labs AI & ML Service:

1. Automotive Industry: ML optimization of production, supply chain improvement, and enhanced manufacturing processes.
2. Healthcare Industry: AI application for improved patient outcomes, error minimization, and real-time health risk identification.
3. Retail Industry: ML for supply chain optimization, fraud detection, and defining customer preferences to boost sales.
4. Vision Processing: AI implementation for self-driving cars, enhanced video surveillance, and improved satellite imagery analysis.

Notable Works of Roade Labs AI & ML Service::

1. AI-ML Based Edge Vision Processing for Vehicle Detection and Verification of Commercial Freight Carriers at a Border Crossing Check-post.
2. Edge Vision Processing Setup: Deploy high-performance AI-enabled edge devices with specialized hardware accelerators. Process video streams from multiple cameras in real-time.
3. Vehicle Detection and Number Plate Extraction: Use edge-based computer vision algorithms and deep learning models for real-time detection. Extract number plates using ANPR technology at the edge to minimize latency.
4. Vehicle Categorization: Train a machine learning model to classify detected vehicles as commercial freight carriers or non-commercial vehicles, optimized for edge deployment.

5. Authenticity Verification: Perform real-time verification of extracted number plates against a local database within edge devices.
6. E-way Bill Database Check: Utilize edge computing to query the central Eway bill database for real-time verification.
7. Result Validation and Alert Generation: Validate results from authenticity and Eway bill verification. Generate alerts for discrepancies to relevant departments for appropriate action.
8. Data Analysis and Reporting: Aggregate data at edge devices and transmit periodically to a central server. Conduct data analytics for insights and decision-making, generating comprehensive reports.