

# **Asadel Technologies**

# Leading in Advanced AI Technology



Compilance and Certification





ISO

120

**ISO** 

ISO 9001:2015

ISO 14001:2015

ISO 27000:2013



# **Driving Transformational Business Growth**

At **Asadel Technologies**, we combine our deep expertise in AI, ML, and DL to create cutting-edge business solutions.

Leveraging advance AI technologies, we help enterprises across industry verticals to solve real world challenges, driving productivity and growth.

Following our mission, we continue to ensure a safer and smarter future for our clients by meticulously churning large volumes of historical data to detect anomalies and trends. Our AI Analytics Platform has been processing live data to detect-track-analyse in real-time.

Our innovative approach and commitment to excellence have earned us marquee clients both in India and global, including:





























For over a decade, we've been delivering indigenous and customised AI products and consulting services across the following verticals:

- Safety-Security-Surveillance
- Industry Automation
- Healthcare Automation

## Security, Safety & Surveillance



### 1. Automated Number Plate Recognition (ANPR)

Our ANPR System is a comprehensive solution for **monitoring and enforcing traffic regulations**. It leverages advanced AI and neural network models to accurately detect and record vehicle licence plate in real-time, ensuring enhanced road safety and efficient law enforcement. In addition to ANPR, it also detects and alerts traffic violations like: speed, red light, helmet, triple-ride and seatbelt, wrong direction and provides real-time data of vehicle class and acount.

#### **Features:**

- High Accuracy, >98%
- Low Latency
- High Scalability
- · Re-trainable AI model
- API Integration
- · Dashboard, Report & Analytics
- Protection from obsolesence



### 2. Face Recognition System (FRS)

Our Face Recognition System (FRS) is an advanced, automated, and adaptive solution designed to **detect and recognize faces** with >96% accuracy. Leveraging deep learning algorithms, the system ensures high confidence levels in both live camera and archived video feed. With a proven track record, FRS offers superior performance in diverse environments, making it an ideal choice for enhancing security and tracking.



- High Accuracy
- Adaptive Learning
- User-friendly GUI
- Comprehensive Analytics
- · Wide Detection Angle
- Multi-device Compatibility
- Multiple Input mode
- Customised dashboard

## Security, Safety & Surveillance

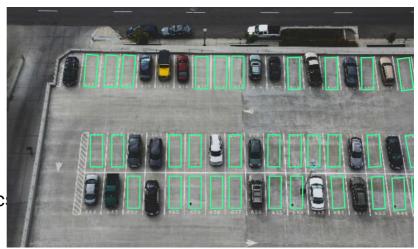


## 3. Automated Parking Management System (AMPS)

Our Automated Parking Management System (APMS) is a curated solution designed to **optimize parking operations with advanced automation**. Using state-of-the-art AI and machine learning algorithms, the system efficiently manages parking spaces, monitors vehicle movements, and ensures seamless parking experiences. It provides real-time data, enhances security, and reduces operational costs, making it ideal for large parking facilities and smart city initiatives.

#### **Features:**

- High Accuracy, >98%
- Low Latency
- High Scalability
- · Re-trainable AI model
- API Integration
- Dashboard, Report & Analytic
- · Real time visibility



### 4. Weapon Detection

The Weapon Detection System is an advanced security solution designed to **identify and alert presence of weapons in real-time through CCTV feeds**. Utilizing cutting-edge AI and neural network models, it accurately detects firearms, knives, and other potential threats, ensuring enhanced safety in public and private spaces. This system is optimized for quick response and high accuracy, significantly reducing risks and improving security measures.



- High Accuracy
- · Real-Time Monitoring
- Instant Alerts
- API integration
- Dashboard, Report &Analytics
- Re-trainable model can include additional objects
- Lower cost of ownership

## **Industry Automation**



### 5. PPE Detection

The PPE Detection System is designed to ensure safety compliance by detecting personal protective equipment (PPE) in CCTV feeds. Utilizing cutting-edge indigenous AI and neural network models, it accurately identifies whether individuals are wearing required PPE such as **helmets**, **vests**, **gloves**, **and masks**. This system is optimized for real-time monitoring, providing immediate alerts and comprehensive analytics to enhance workplace safety.

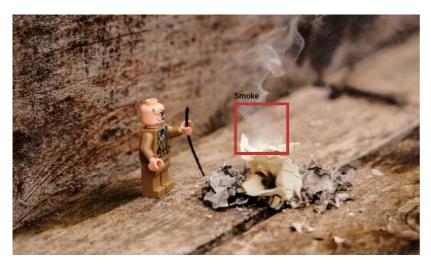
#### Features:

- High Accuracy, >97% with 14 classes of PPE gears
- Real-Time Monitoring
- Instant Alerts
- API integration
- Dashboard, Report & Analytics
- Operational in both indoor & outdoor



### 6. Fire & Smoke Detection

Our Fire & Smoke Detection System is an automated, adaptive software solution that accurately detects different types of fire and smoke in CCTV live streams and images or videos. Utilizing advanced neural models trained on extensive fire and smoke datasets, this system ensures high accuracy with low detection latency, significantly reducing overheads.



- High Accuracy
- Low Latency
- · High Scalability
- Instant Alerts
- API Integration
- Auto Monitoring
- Dashboard, Reports & Analytics



### 7. Integrated Command & Control Center (ICCC)

Our Integrated Command & Control Center (ICCC) detects, tracks, monitors, and responds to alerts raised by various building management systems, including: **CCTV, Fire, Access Control, Motion Sensors, Public Address System, etc.** 

It enables operators to control facility and integrated IP-based & MODBUS supported devices locally or remotely within a dark site.

#### **Features:**

- View, Monitor & Manage
- Real-Time Alerts & Alarms
- Operational Effectiveness
- Cost Saving
- Emergency Response
- Dashboard + Report Analytics
- Centralised aggregation of alerts & alarms from disparate systems



### 8. Object Detection

The Object Detection System detects objects in CCTV live feeds and images in designated regions of interest (RoIs). It uses a neural model, trained on different objects, and is optimized for low latency & high accuracy with significant reduction in overheads. Historical & predictive data analytics are available as an additional service. All Al models are adaptive and re-trainable to detect industry-specific objects, increasing effective use-life & lowering total cost of ownership.



- High Accuracy
- · Automated Detection
- · Real-time Processing
- Adaptive Learning
- User-friendly GUI
- Comprehensive Analytics
- · Wide Detection Angle
- Multi-device Compatibility
- Multiple ROI configuration



### 9. Defect Detection

Our Defect Detection System is designed to identify and classify defects in manufacturing processes, ensuring high-quality standards and minimizing production errors. Utilizing cutting-edge custom-built machine learning algorithms, the system accurately detects surface defects, dimensional inconsistencies, and other anomalies in real-time, providing immediate alerts and detailed analytics for corrective actions.

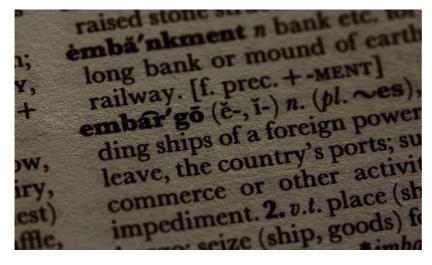
#### **Features:**

- High Accuracy
- · Real-Time Processing
- Dashboard, Report & Analytics
- API Integration
- Auto Monitoring
- Quality Assurance



### 10. Optical Character Recognition (OCR)

The Optical Character Recognition (OCR) System is a robust solution designed to convert different types of documents, such as scanned paper documents, PDFs, or images captured by a digital camera, into editable and searchable data. Leveraging state-of-the-art AI and neural network models, the system ensures high accuracy and speed in text recognition, making it ideal for various applications including data entry automation, document management, and archiving.



- High Accuracy
- · Real-Time Processing
- Multi-Language Support
- API Integration
- Auto Monitoring
- · Document Management



### 11. Cancer Screening

Our Oral & Skin cancer Screening is a verified and tested product designed to assess and analyse the status of oral & skin lesions using advanced artificial intelligence. Leveraging machine learning and convolutional neural network models, the system can differentiate lesions into three categories: Benign, Potential Malignancy or Squamous Cell Carcinoma.

#### **Features:**

- Lesion Differentiation
- Confidence Scores
- User-Friendly App
- 3G/4G/5G Compatibility
- Remote Screening
- Real-Time Results



### 12. Automated Queue Management System (AQMS)

Our AQMS is a fully automated queue management software designed to streamline customer flow by controlling automated token calling based on queue volume and service time. Tokens can be printed with car or QR codes via a thermal printer with auto-cutter support. Overhead LED TVs display called tokens with audio notifications in both Hindi and English.



- · Automated Token Calling
- IP based system with no manual intervention
- Priority Queuing Option
- LED Display + Announcements
- High Scalability
- Detailed Analytics
- · Paperless operation

### **Healthcare Automation**



### 13. GAIT Monitoring

GaitMon is an indigenously developed wireless product designed for detailed real-time and historical gait and physiological assessment. Utilizing advanced algorithms, it analyses locomotion to highlight normal and pathological walking patterns and problems.

The system comprises three modules:

- **1. Smart In-Soles:** Intelligently positioned sensors capture accurate pressure in fore, mid, and hind foot regions.
- **2. Smart Nordic Sticks:** Clinical-grade walking sticks with pressure sensors and heart rate + SpO2 monitoring.
- **3. GaitMon App Suite:** Real-time monitoring of parameters including p(max), p(average), COP(X,Y), COP(Velocity), Roll, Pitch, and Yaw.

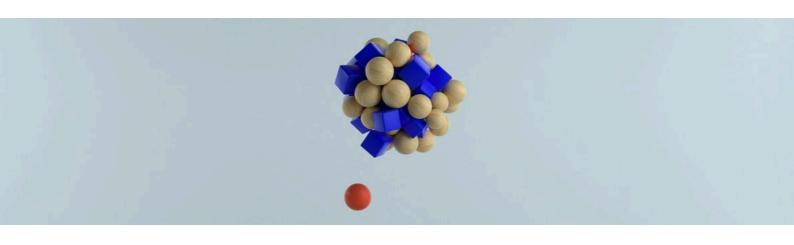
Verified and tested for use by clinicians and sports authorities, it enables effective gait monitoring and analysis during various activities.

- Real-Time Analysis
- Clinician Approved
- Pathology Detection
- Sports Monitoring
- · Dashboard Insights
- Graphs & charts
- Session based comparative analytics





# **Our Services**



At **Asadel Technologies**, we offer a comprehensive suite of services designed to empower businesses with the latest in AI and machine learning. Our expert team is dedicated to providing tailored solutions that drive innovation, enhance efficiency, and deliver measurable results.

From initial concept to full-scale implementation, we have remained trusted partners to our clients in navigating complexities of their digital landscape.

#### Our services include:



innovation



### **Product Discovery**

Navigating from design to development



#### **Data Annotation**

Transforming raw data into actionable insights



Detect . Track . Analyse

# **Contact Us**

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