

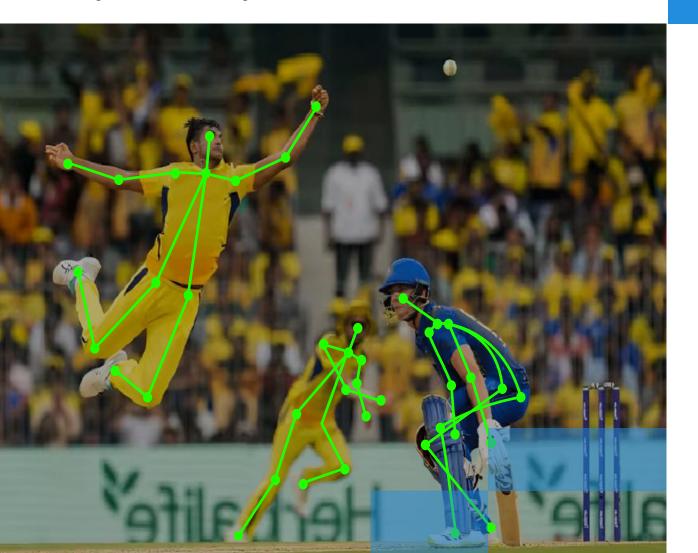
# DATA SERVICES To power your algorithms!

### About LSPL

## Data Annotation & Data Labeling services to Power your Algorithms

Learning spiral has a workforce with diverse set of skills and the ability to deliver data annotation and data labeling services at scale. We have a rich history of 15+ years of handling sensitive data on a large scale.

Our affordable data annotation and data labeling services provided by trained in-house dedicated professionals will ensure high quality labeled data to meet your needs.



# Experienced in annotating sensitive data at scale!

One-stop Data Labeling and Annotation Service Provider

#### Free Pilot **Project**



Our dedicated Pilot project team performs the sample project





Client can evaluate our work quality and reliability at minimum risk

Our team is flexible to perform sample project in any platform as per clients preference.



# Human in the Loop: Bridging the Gap Between Al and Accuracy

#### -COMPUTER VISION:

Bounding Box Annotation, Polygon Annotation, Keypoint & Skeletal Annotation, Semantic Segmentation, Geospatial Imaging

#### NATURAL LANGUAGE PROCESSING:

Audio Validation & Transcription, Sentiment & Intent Analysis, Named Entity Recognition & Linking.

#### -DATA ENHANCEMENT:

Enhance and define raw data, ensuring accurate data from a provided source, Data normalization, Data/Entity extraction.

#### **CONTENT TRANSFORMATION:**

Attribute Mining, Search Relevance, Product Taxonomy Speech Recognition, Classification for Unstructured Data.

#### -DIGITAL PUBLISHING:

Pre-Publishing Services, Ebook Design & Production, Data Entry, XML Conversion, Adding Animation, Music & Video to Your Digital Publication.

#### -DATA DIGITIZATION:

User-Generated Content (UGC) Moderation, Transcribing a Manuscript, Data Validation, Entity Labeling.



#### **Experienced and Dependable**

Rich history of handling sensitive and large amounts of data.

#### Scalability & Flexibility

Ability to deliver data annotation & Data labeling services on demand and at scale.

#### Secured

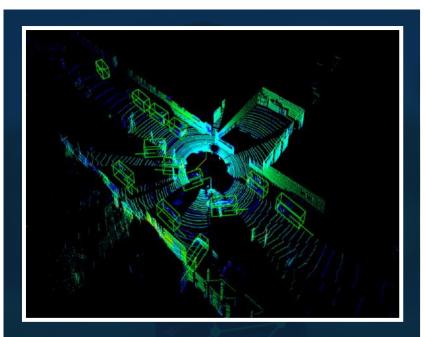
Services delivered from ISO 27001 Compliant Organization

#### In-house & Trained

In-house, Professional, Dedicated and trained teams.

#### Key differentiating qualities

- Stable & Trained workforce
- Delivery centres located at lower cost cities
- Cover a wide range of skill sets in 2D, 3D & Lidar
- Cover a wide range of Industrial use cases
- Flexible and Scalable teams
- Flexible Billing methodologies



#### A brand you Can Trust!

- NDA & ISO 27001 compliant
- Professional & dedicated workforce working from secured offices
- Experience of working with International clients
- 15+ years handling sensitive data
- Rapid ramp up capability for scalability in execution

#### Certifications

We are ISO 27001, CMMI DEV/3,ISO 9001 certified and AWS Partner











## A quality first approach

#### We comply with International norms

With skilled team and well-equipped infrastructure, we guarantee 98% and above quality. We ensure that all your images and videos are accurately annotated by undergoing custom steps for quality checks in the work flow. We also comply with International certifications.





## 100% Data Security

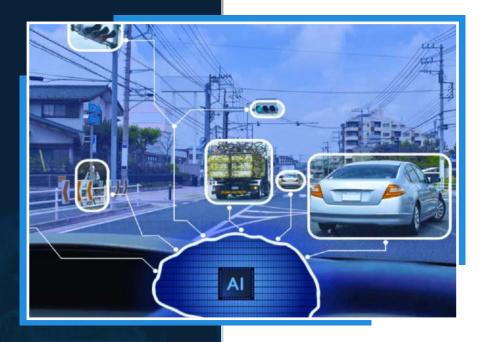
Guardians of your data. Trust us for 100% data security with EU GDDR standards. Your information, our top priority.

## High-level Quality Checking System

Quality is our signature. Our high-level quality checking system ensures accuracy and reliability in every annotated dataset.



## **Use-Cases**



## **Autonomous Vehicles**

Currently, we are providing some car manufacturers with annotation services to integrate AI technology in future product offerings.

Our key Autonomous vehicle projects are as follows Object Detection

- Number Plate Detection
- Analysing Semaphore
- Lane Differentiation
- In-Cabin Monitoring

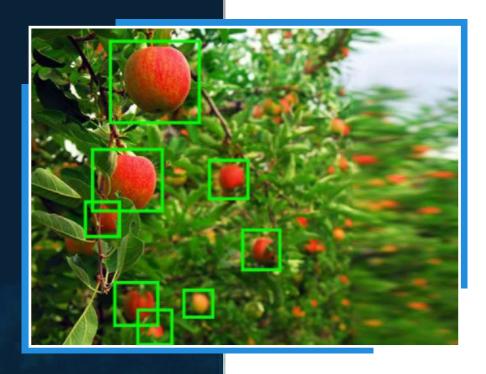
- Sensor Modeling
- ADAS Systems
- Object Tracking

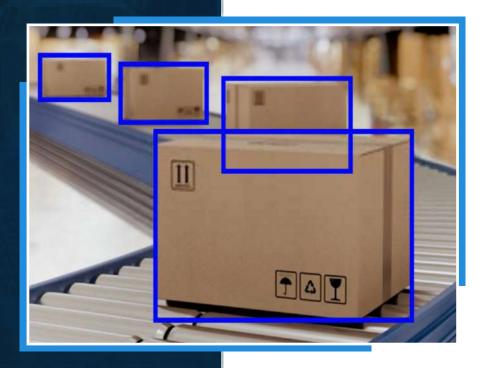
## Medical Annotation

Medical annotation is a vital process in healthcare and research, involving the detailed labeling, tagging, or categorization of various medical data types, such as medical images, clinical notes, or genomic sequences. Our Key medical projects are as follows

- MRI Annotation
- Cell Annotation
- Tissue Annotation
- Anatomy Sorting
- Medical Instrument Annotation

- Dental Annotation
- Disease Annotation
- Neuron Annotation
- Organ Annotation





# **Agriculture Annotation**

With the advancement in technology, many ideas like perception models are developed to address the challenges of agricultural fields.

Our key Agri-Tech projects are as follows

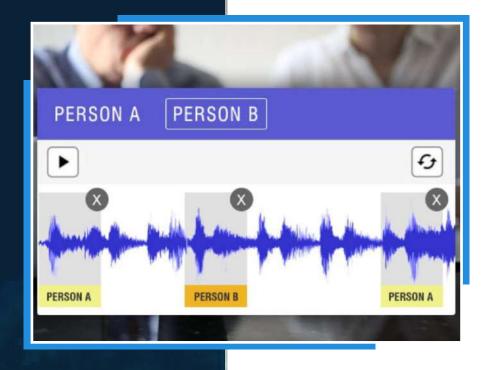
- Crop Detection
- Traceability
- Crop Health Monitoring
- Weed Detection
- Fruits and Vegetables Detection

## Smart Logistic Annotation

Logistic is one of the areas where artificial intelligence is currently leveraging. Warehouse applications like package handling, delivery and transportation can be a tiresome task when handled manually.

Our key Logi-Tech projects are as follows

- Goods Tracking
- Barcode Annotation





## Audio Annotation

Audio annotation method plays a crucial role in various fields and applications, including speech recognition, content indexing, audio search, and accessibility. In audio annotation, our data annotators analyze and describe the content of audio recordings. Here are some key aspects of audioannotation:

- Transcription
- Language and Speaker Identification
- Sentiment Analysis
- Content Summarization
- Keyword Tagging

- Timestamps
- Quality Assessment
- Accessibility
- Training Data for Machine Learning
- Data Management

## Natural Language Processing

We can handle NLP needs covering a wide range of tasks like

- Audio validation & transcription
- Sentiment & Intent analysis
- Named entity recognition & linking

So irrespective of your needs we can help you achieve results faster.





## Aerial / Drone Annotation

Aerial image annotation for drone imagery including thermal images involves meticulously labeling elements like buildings, pedestrians, vehicles and vegetation, using advanced computer vision. This annotated data refines machine learning models, enabling autonomous drone navigation for applications in agriculture, infrastructure inspection, and disaster response and many other fields and includes annotation techniques such as bounding boxes, segmentation, key-points etc.

Our key Aerial/Drone projects are as follows

- Thermal Image Annotation
- Geospatial Analysis
- Disaster Management
- Rooftop Annotation

Field Analysis

# **Sports Annotation**

Sports annotation involves precisely labeling elements in images or videos, using advanced techniques. This annotated data refines machine learning models, enhancing sports analytics, player tracking, event tracking, and game insights for applications in coaching, broadcasting, performance analysis and many other areas and includes annotation techniques such as bounding boxes, segmentation, key-points etc.

Our key Sports Tech projects are as follows

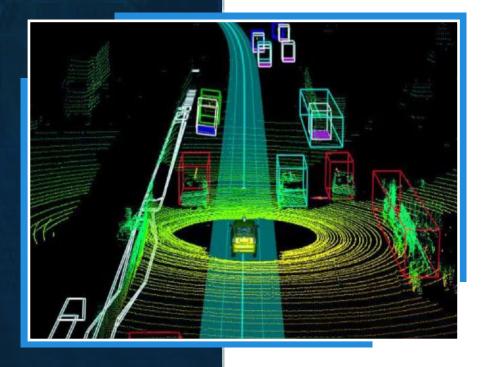
Player Tracking

- Player annotation Validation
- Player action Identification
- Event Tagging
- Player Segmentation



## Baby Activity Analysis

Baby activity analysis annotation entails meticulously labeling actions in images or videos, utilizing advanced techniques. This annotated data refines machine learning models, automating childcare tasks, facilitating applications in monitoring infant development, and enhancing parental insights into baby behavior and well-being, supports developmental milestones tracking, fostering healthy infant growth.



## Lidar Annotation

We can handle LiDAR Annotation needs covering a wide range of tasks like:

- 3D Point Cloud
- Cuboid Annotation
- Polygon Annotation
- Semantic segmentation

So irrespective of your needs we can help you achieve accurate results faster.





## Retail Annotation

The retail industry leverages AI models for enhanced customer experiences, personalized marketing, efficient inventory management, and optimized supply chain operations, driving growth and innovation. Our Key Retail projects are as follows

- Retail Shelves Analysis
- Customer Behavioural Analysis
- Shoppers Tracking
- Product Recognition
- Barcode Analysis
- Theft Detection

## Data Enhancement

Enhancement Services will help you to make sure that you have all information to reach your customers.

- Data Verification
- Data Curation
- Data normalization
- Data/Entity Extraction



## Digital Publishing Services

- Scanning of Old Documents & Books
- Digitization and Preservation of Archival
- Data Entry, Double Keying & OCR
- HTML/XML/SGML Tagging, TEX/LaTeX Coding
- Structuring for Web/Publishing HTML/XML/CML/Math ML Illustrations



# **Content Services**

Our Qualitative Content services consist of interoperability, reliability, and accountability.

Explore Learning Spiral Intelligent Content Services.

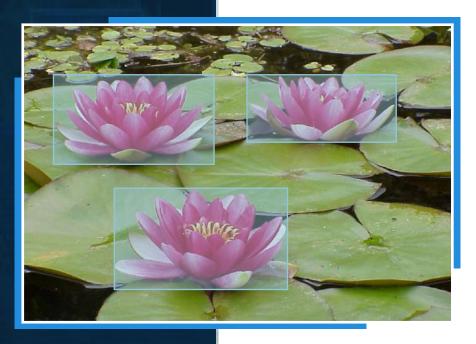
## **Annotation Techniques**



# **Computer Vision**

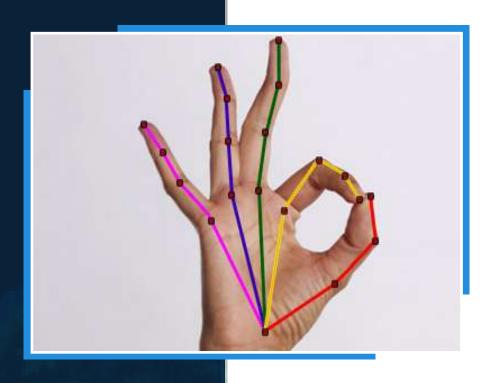
Our trained teams can help meet requirements for:

- Bounding Box Annotation
- Polygon Annotation
- Keypoint & Skeletal Annotation
- Semantic Segmentation
- Geospatial Imaging



## Bounding Box Annotation

Bounding box annotation is a fundamental technique in computer vision used to train object detection models. It involves drawing rectangles around objects in images or videos to pinpoint their location and size. These annotations act as a teaching tool for the model, helping it recognize and locate specific objects within unseen images. Bounding box annotation is crucial for tasks like self-driving cars identifying pedestrians and road signs, or facial recognition software pinpointing faces in photos.



## keypoint Annotation

Keypoint annotation takes image labeling a step further by identifying specific landmark points on objects within images or videos. These points, often representing critical features or joints, are like a digital skeleton. They can be connected to form a "keypoint skeleton" that reveals the pose, shape, or even movement of the object. Unlike bounding boxes that focus on the entire object area, keypoints provide more granular details. This data is invaluable for training computer vision models.



## Polygon Annotation

Data is labeled using a perfectly enclosed contours. The technique is used in processing training data for models used in very precise applications. These labels assist the machine to get a clear idea on the structure of the object.



## SEMANTIC SEGMENTATION

Images are segmented semantically at its pixel level. Datasets processed employing this technique can provide the models, a sounder understanding of what the data holds.

#### **Services**

Image annotation

Text annotation

Audio annotation

Video annotation

LiDAR annotation

#### **Techniques**

Bounding Boxes, polygons, Semantic Segmentation Masks, Keypoint Annotation

Named Entity Recognition, Sentiment Analysis, Intent Recognition, Text Classification

Transcription, Speaker Diarization, Emotion Recognition, Intent Recognition, Keyword Spotting

Bounding Boxes, Polygons, Semantic Segmentation Masks, Object Tracking, Action Recognition, Event Detection

Object Segmentation, Semantic Segmentation, Instance Segmentation, Part Segmentation

## **Data Labeling Use Cases**



Healthcare



**Automotive** 



**Agriculture** 



**Sports** 



Logistics



Retail



**Aerial** 



Food and Beverages



Defect Detection



Human Attribution

#### **3D POINT CLOUD**



3D Box Labeling



3D Segmentation



LiDAR Data Labeling



Polyline Annotation



Polygon Annotation





Interested in trying our services?

#### **Get in touch now!**

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