

Keymakr offers 2 Data Mining options: Data Collection and Data Creation.

Time is of the essence when there is a timeline for a project. In some cases, you might not have the volume of the data required or tools to collect it and in others, it simply does not yet exist. Regardless of what the reason is, we are here to make sure that the data required for a project is accurate and collected in a timely manner. Here is how we do that.

Data collection

We have developed proprietary tools for a faster and more efficient way to collect data. By doing so, we have reduced the time and increased our capacity to process the mass collection of data. We offer to find and collect images or videos from open sources available online, in an efficient and productive way. Here are some examples of the data collection we have done for a few projects we have worked on:

Weather prediction algorithm: we had to collect 10,000 images of floods from different locations around the globe and annotate the water levels. The training data set was used to build weather prediction models.

Face recognition: we collected 50,000,000 images of people. The data had to be extremely diverse. From a ratio of 60% Female and 40% Male, the strict request for the images was to have a representation of multiple ethnicities with the exact proportions of 25% Indian, 25% Caucasian, 25% African and 25% Asian. This training data set was used for teaching face recognition algorithms.

Medical Imaging: 3,000 MRI images were collected and annotated for brain tumor recognition. Due to the sensitivity of the medical field and the required accuracy, we have created partnerships with hospitals for the medical data collection and to have the annotation for these projects done by certified medical professionals as radiologists, etc.

Food industry: Our team collected 20,000 images of products such as vegetables and fruits which were then classified by categories. This training data set was used for the teaching of smart fridges. They were able to recognize produce inside the fridge and generate an alert when products expire.

Retail: We collected 100,000 images of various clothing garments. The training Data set was used for e-commerce algorithms and their ability to recognize and classify clothing items.



Data creation

We specialize in tailor-made solutions. If your data is nowhere to be found, we can set up a production to create the data you require. Here are a few examples of the work we have done to create the necessary data for past projects:

Automotive: By mounting a camera in a vehicle, we created an <u>in-car video</u> footage of people driving and looking at the road. The main purpose was to track the behavior and movements of the person driving the car as well as the passenger.

<u>Outside- facing cameras</u> were placed on vehicles and 500 hours of video footage was created. The data gathered consisted of vehicles driving in different weather conditions, in multiple locations, and on a large variety of roads.

Security: Our team photographed over 1000 images that reflected busy city intersections where people were captured crossing a road.

Warehousing: Shots of over 100 images and hours of video footage were created of numerous warehouses. The warehouse workers movement were documented and recorded. The images and videos were annotated with skeletal annotation to track all the movements of the people and mark (tag) hazardous scenarios that could potentially occur. The training data set was used to train cameras in warehouses to recognize human motion and to alert when dangerous situations arise.