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Annotation Tools:

1. LabelImg:

Description: A free and open-source tool for image annotation. Supports bounding boxes, polygons, and keypoints.
Link: https://www.v7labs.com/blog/labeling-guide

2. VGG Image Annotator (VIA):

Description: A web-based annotation tool developed by the Visual Geometry Group at Oxford University. Supports various tasks like image classification, object detection, and image segmentation.
Link: https://www.robots.ox.ac.uk/ vgg/software/via/

3. Labelbox:

Description: A collaborative annotation platform with features like AI-assisted labeling, real-time project management, and integrations with various machine learning

Frameworks.
Link: https://labelbox.com/

4. CVAT:

Description: An open-source platform for creating datasets for computer vision tasks. Supports various annotation formats and integrates with popular deep learning frameworks.
Link: https://www.cvat.ai/

5. RectLabel:

Description: A simple and lightweight tool for creating bounding box annotations.
Link: https://github.com/ryouchinsa/RectLabel-support

YOLO Annotation Format:
The YOLO annotation format uses plain text files (.txt) to store object annotations for each image. Each line in the file represents a single object and contains the following information:

Class ID: An integer representing the class of the object (starting from

0).
Center X: The normalized X-coordinate of the bounding box center, ranging from 0 (left edge) to 1 (right edge).
Center Y: The normalized Y-coordinate of the bounding box center, ranging from 0 (top edge) to 1 (bottom edge).
Width: The normalized width of the bounding box relative to the image width.
Height: The normalized height of the bounding box relative to the image height.
Example:

0 0.5 0.3 0.2 0.4
Class ID: 0, Center: (0.5, 0.3), Width: 0.2, Height: 0.4

2 0.8 0.7 0.1 0.2
Class ID: 2, Center: (0.8, 0.7), Width: 0.1, Height: 0.2

This example shows annotations for two objects in an image. The first object belongs to class ID 0 (represented by the number 0) and has a bounding box centered at (0.5, 0.3) with a width of 0.2 and a height of 0.4 relative to the image dimensions. Similarly, the second object belongs to class ID 2 and has its corresponding bounding box details.