

Image Annotation Tools

1. PubMed and Google Scholar were searched up to July 9, 2022, with the following search strategy: (“Annotation tool” OR “annotation software” OR “Image annotation”)
2. The World Wide Web was also searched using the Google Search engine up to July 9, 2022, with the following search strategy:
 - *The First search: “Image annotation”, ninety-seven websites introduced on the first 10 pages were evaluated.
 - *The Second Search: “Image annotation tool”, ninety-nine websites introduced on the first 10 pages were evaluated.

Final list of included:

ImageJ/ FIJI

VGG Image Annotator

Seg3D

MakeSense.AI

CVAT

Colabeler

Labelme

Label-studio

Ratsnake

Classifai

	Image annotation tool	UP to 100 MB	Desktop	Web-Based	Free	Output	No Dependency	Included
1	Quick Annotator	✓	✓	✓	✓	---	×	×
2	RIL-Contour	×	✓	×	✓	NiftI, CSV, Excel format	×	×
3	VAMPIRE annotation tools	?	✓	×	✓	Text file	×	×
4	ImageJ/ FIJI	✓	✓	×	✓	Tiff, Gif, JPEG, TEXT, ZIP, RAW DATA AVI, BMP, PNG, PGM, FITS, LUT, ANALAYZE	✓	✓
5	VGG Image Annotator	---	×	✓	✓	SON, CSV, COCO format, png		✓
6	ePAD	---	×	✓	✓	DICOM		×
7	Horos Viewer		✓ (macOS)	×	✓	XML, CSV		×
8	InVesalius	×	✓	×	✓	STL, OBJ, and PLY formats		×
9	MedSeg	----	×	✓	×	NiftI		×
10	MeVisLab	×	✓	×	✓	DICOM TIFF,RAW LUMISYS, PNM, Analyze PNG, JPEG		×
11	MITK	×	✓	×	✓	DICOM		×
12	ParaView	×	✓	✓	✓	CSV, PDF, VRML, X3D		×
13	Seg3D	✓	✓	×	✓	bitmap, png, tiff, dicom, matlab v7.3, and NRRD		✓
14	Apeer	---	×	✓	×	CSV, JSON, Binary masks, and labeled images		×
15	AIDA	×	×	✓	✓	JSON		×
16	Data Turks	✓	✓	×	✓	JSON, Standard	×	×

						NLP or Spacy format, Pascal VOC, Tensorflow		
17	FastAnnotationSingleObject	✓	✓	✗	✓	XML	✗	✗
18	FastAnnotationTool	✓	✓	✗	✓	CSV	✗	✗
19	Alturos.ImageAnnotation	✓	✓	✗	✓	YOLO	✗	✗
20	Visipedia Annotation Toolkit	---	✗	✓	✓	COCO, JSON		✗
21	OpenLabeler	✗	✓	✗	✓	XML files		✗
22	Rhoban Tagger	---	✗	✓	✓	Json		✗
23	Image Annotator Plug-in for Drupal	✓	✓	✗	✓	----	✗	✗
24	Pixorize	---	✗	✓	✓	---		✗
25	LEAR Image Annotation Tool	✓	✓	✗	✓		?	✗
26	Jsoda	✓	✗	Browser-based	✓	Text file Pascal VOC, xml files	✓	✗
27	DeepLabel	✗	✓	✗	✓	KITTI, Darknet for YOLO, Pascal VOC, COCO, Google Cloud Platform (e.g. for AutoML), TFRecord		✗
28	Images Annotation Programme	---	✗	✓	✓			✗
29	OCLAVI	---	✗	✓	✓	---		✗
30	ImageTagger	✓	✓	✓	✓	User definable	✗	✗
31	GTCreator	?	✓	✗	✓	Binary masks, CSV file	?	✗
32	V7	?	?	?	Free for education accounts only	JSON, XML, COCO, Pascal VOC, pickle		✗

33	MakeSense.AI	----	x	✓	✓	YOLO, VOC XML, VGG JSON ,CSV, COCO JSON, PIXEL MASK	✓
34	Annotell	-----	x	?	x		x
35	Dataloop AI		x	?	x		x
36	Deepen AI	-----	✓	✓	x		x
37	Hasty		x	?	✓	PNG,custom format, Json, COCO	x
38	UnderstandAI		x	?	x		x
38	VOTT	x	✓	x	✓	Azure Custom Vision Service, CNTK, Pascal VOC, TFRecords, JSON, CSV	x
39	CVAT		x	✓	✓		✓
40	Colabeler	✓	✓	x	✓	PascalVoc XML and CoreNLP file	✓
41	Apeen				x		x
42	LabelBox		x	✓	x	CSV, JSON	x
43	Labelme	✓	✓	x	✓	JSON file, COCO, VOC format	✓
44	HIVE		x	?	x		x
45	Clickworker		x	?	x		x
46	Telus International	----		----	x		x
47	Cloudfactory				x		x
48	SuperAnotate	x	✓	✓	x		x
49	Isahit		x	?	x		x
50	Sentisight.ai		x	?	x		x
51	Learning Spiral				x		x
52	LabelImg	✓	✓	x	✓	XML files in PASCAL VOC, used format by ImageNet, YOLO	x

53	Ratsnake	✓	✓	✗	✓	Custom text, owl, XML	✓	✓
54	Innodata		✗	?	✗			✗
55	Scalabel		✗	✓	✓		✗	✗
56	SAMA ANNOTATE				✗			✗
57	imerit				✗			✗
58	Label-studio	✓	✓	✓	✓		✓	✓
59	Img LAB		✗	✓	✓			✗
60	Yolo_mark	✓	✓	✗	✓		✗	✗
61	PixelAnnotationTool	✗	✓	✗	✓			✗
62	OpenLabeling	✓	✓	✗	✓	Pascal VOC, YOLO	✗	✗
63	Turktool	✓	✓	✗	✓		✗	✗
64	Pixie	✓	✓	✗	✓		✓	✓
65	Anno-Mage	✓	✓	✗	✓	CSV, XML	✗	✗
66	Catmaid	✓	✓	✗	✓		?	?
67	Lost		✗	✓	✓			✗
68	Annotorious	✓	✓	✗	✓		✗	✗
69	Sloth	✓	✓	✗	✓		?	?
70	Universal data tool	✓	✓	✓	✓	CSV, JSON	?	?
71	COCO Annotator		✗	✓	✓	COCO		✗
72	Diffgram		✓	✓	✓		✗	✗
73	Classifai		✗	✓	✓	jpg, JPEG, PNG tif, tiff bmp, webp, pdf		✓
74	DataGym		✗	✓	✓			✗
75	Etiketai		✗	✓	✓	PASCAL VOC XML, YOLO		✗
76	Ybat		✗	Browser-based	✗	YOLO, VOC, COCO		✗
77	Keymaker		✗	?	✗			✗
78	Label tool		✗	✓	✓			✗
79	bmw Label Tool lite		✓	✗	✓		✗	✗
80	Scale				✗			✗
81	Kili		✗	?	✗			✗
82	Cogito		✗	?	✗			✗
83	TicTag				✗			✗
84	Eagle		✓	✗	✗			✗
85	Analytics		✗	Outsourcing service	✗			✗

86	Mindy support		x		Outsourcing service	x			x
87	BUNCH		x		Outsourcing service	x			x
88	Imageannotation		x		✓	x			x
89	OpenCV	x	✓		✓	✓			x
90	Shaip			x	Outsourcing service	x			x
91	4smartmachines	x	✓		x	x	----		x
92	webKnossos		x		✓	✓			x
93	Ximilar		x		✓	x			x
94	BIIGLE		x		✓				x
95	SunTec		x		Outsourcing service	x			x
96	Good Annotations		x		✓	✓			x
97	Annotator		✓ (linux)		x	✓	JPEG, PNG, TIFF, BMP, PDF, and SVG	x	x
98	Image Annotation control		x		x				x
99	Toloka		x		?	x			x
100	Crowdflower		x		?				x
101	Ango AI		Cloud and On-prem		Cloud and On-prem	Free for projects up to 10k annotations	DICOM, JPG, PNG, pdf		x
102	Redbrick AI		x		?	x	DICOM, Nifti, PNG, JPG		x
103	Maxicus		x		Outsourcing service	x			x
104	LungMap								
105	McMarvin		x		Outsourcing service	x			x
106	Zillin		x		✓	Free for first 2500 images			x
107	Plainsight		x		?	✓	COCO, YOLO, Pascal VOC		x
108	Markup Hero		✓		✓	Free plan and			x

					paid plan		
109	LabelD	✓	✗	✓			✗
110	LabelFlow	?	?	✓	YOLO, COCO	✗	✗
111	TaQadam	✗	✗	✓			✗
112	iMark	✗	✗	✓			✗
113	IAt	✓	✓	✓		✗	✗
114	Labfolder				Free and Paid plans		✗
115	Azure ML	✗	?	✗			✗
116	Humannotation	✗	✓	✗			✗
117	BRIMA	✗	✓	✓	COCO, Json		✗
118	CloudApp image annotation tool	✓	✗		Free and paid plans		✗
119	Encord	✗	?	✗			✗
120	PhotoStuff	✗	✓		XML		✗
121	Image annotation from LeSamo	✓	✓	✓	JSON	✗	✗
122	vslearn	✓	✓	✗	Json	✗	✗
123	LCFinder	✓	✓	✗		✗	✗
124	Jsimagetool	✓	Browser-based	Browser-based			✗
125	React annotation tool	✓	✓	✗		✗	✗
126	Supervisely	✗	✓	✗	JSON, png, TFRecords and XML		✗
127	RectLabel	✓	✓	✗	✗	YOLO, Create ML, COCO, JSON, and CSV formats	✗
128	3D-Slicer	✗	✓	✗	✓	NRRD or NIFTI file	✗
129	Adobe Photoshop	✗	✓	✗	✗		✗
130	ITK-Snap	✗	✓	✗			✗