



学习数据构建服务的介绍



Baobab株式会社

Baobab所提供的服务

1. 使用工具制定及收集学习数据

Baobab为了制定及收集图像、声音的数据，准备了各种各样的工具，切合客户的实际需求，提供稳定快捷的高质量的学习数据。

运用本资料中所介绍的工具，由受过训练的Baobab的作业者(以下称：Baopart)进行数据的制定及收集。

*以下所介绍的工具全部都是Baopart专用工具。

2. 协助拟定作业规范及说明书

为您在制定、收集数据时的规范及说明书提供帮助。

3. 质量管理

对于Baopart，作业前将依据各项目计划的规范进行培训。

此外，任何一种工具都在管理页面由Baobab的管理者以及Baopart主管对数据执行校验，对数据质量进行严格的管理。





学习数据构建服务工具的介绍

*以下所介绍的工具全部都是Baopart专用。






附加图像及动画说明文的工具
Baobab-Caption

所谓Baobab-Caption

- 可以附加图像及动画说明文的网络工具

Video / Image Captioning

Please annotate caption to the image below (in English only):



Caption Text

Submit

Skip this annotation

(Baobab-Caption作业者操作的画面)


Baobab-Caption能够做的

- 可由最多8位Baopart针对1幅图像及动画同时附加说明文字（最多8个说明文/每幅图像及动画）
- 除了日语说明文之外，还支持英语，中文等各种语言



Video / Image Captioning

Please annotate caption to the image below (in English only):



Caption Text

Submit

Skip this annotation



Baobab-Caption的交货数据

○以CSV格式的交货

[CSV文件]

Image File	Caption Text
xxxx(文件名).png	男人站着
xxxx(文件名).png	穿白衣服的男人
xxxx(文件名).png	男人在做冰沙
xxxx(文件名).png	男人站在桌子旁边
xxxx(文件名).png	女人看着男人
xxxx(文件名).png	在室外卖冰沙

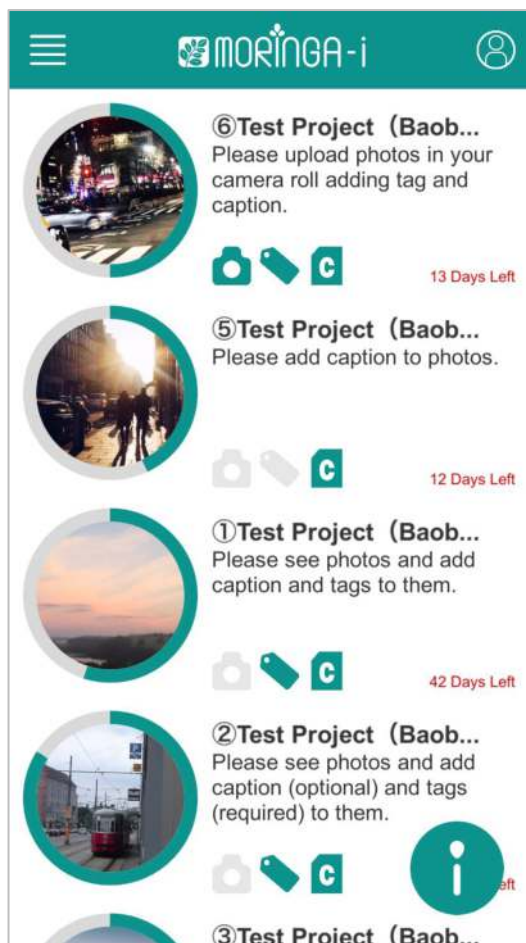


图像收集·标签/说明文添加的App

Moringa-i

所谓Moringa-i

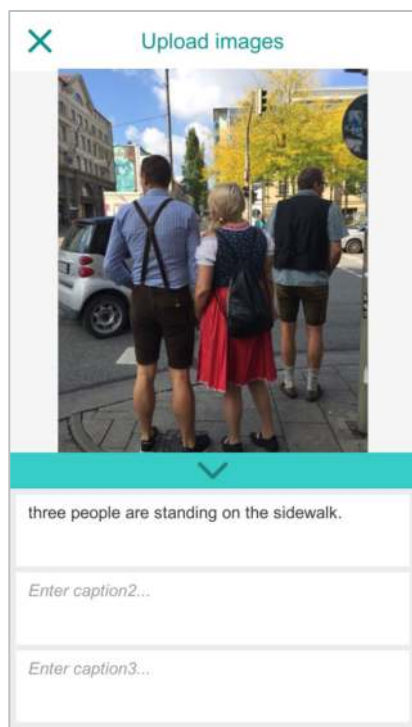
- 可以进行图像收集以及对客户提供的图像标注标签·附加说明文的智能手机专用App



(App·项目计划列表画面)

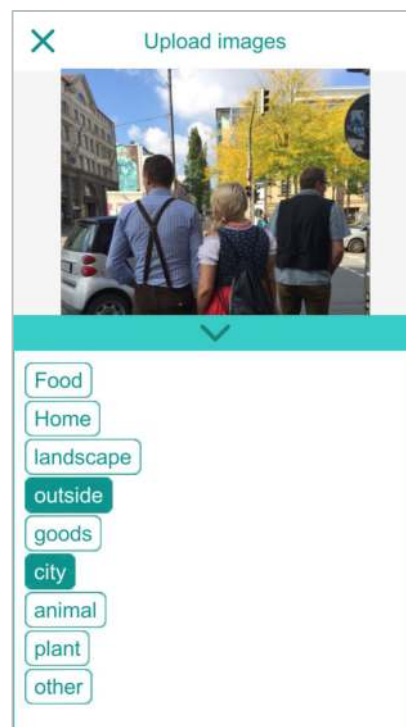
Moringa-i能够做的

- 图像收集 (jpeg格式·在海外的图像收集也是可能的)
- 给收集的图像标注标签, 附加说明文
- 给客户提供的图像标注标签, 附加说明文
- 日语之外, 还支持英语, 中文(简体、繁体) *标签仅支持英语



(附加说明文的画面)

最多可以附加 100字的3段说明文



(标注标签的画面)

最多可以附加 20个标签

Moringa-i的交货数据

○收集图像数据是jpeg格式

○标签·说明文的数据是以CSV格式交货

[CSV文件:添加过图像收集&标签·说明文的情况]

filename	latitude	longitude	country	address	tag1	tag2	caption1	caption2	caption3
file_00001.jpg	xx.xxxx xx	xxx.xxxxx xx	Japan	Japan, 〒xxx-xxxx Tokyo, Chiyoda-ku, Yurakucho	outside	landscape	鸟飞在蓝色的天空里		
*file_00002.jpg	xx.xxxx xx	xxx.xxxxx xx	England	England, Bloomsbury, London WC1B 3DG	outside	city	three people are standing on the sidewalk.		

[CSV文件:为您所提供的图像附加了标签,说明文的情况]

filename	tag1	tag2	caption1	caption2	caption3
file_00001.jpg	outside	landscape	鸟飞在蓝色的天空里		
file_00002.jpg	outside	city	three people are standing on the sidewalk.		



声音收集及标签标注的App
Moringa-v

所谓Moringa-v

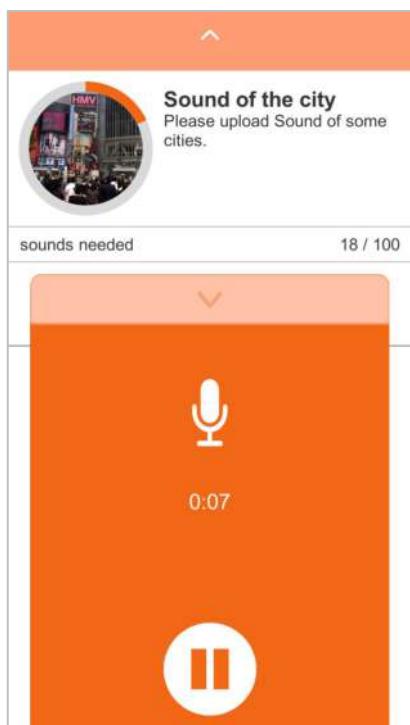
- 可收集声音并能给收集到的声音标注标签的智能手机专用App。



(软件·项目计划列表画面)

Moringa-v能够做的

- 收集声音 (WAV格式、还可收集海外的图像)
- 给手机的声音标注标签
- 除了日语之外, 还支持英语、中文等各种语言 *标签只能是英语



(收集声音的画面)

可收集最长30秒的声音



(标注标签的画面)

最多可标注20个标签

Moringa-v的交货数据

○声音数据是WAV格式

○说明文的数据是以CSV格式交货

[CSV文件]

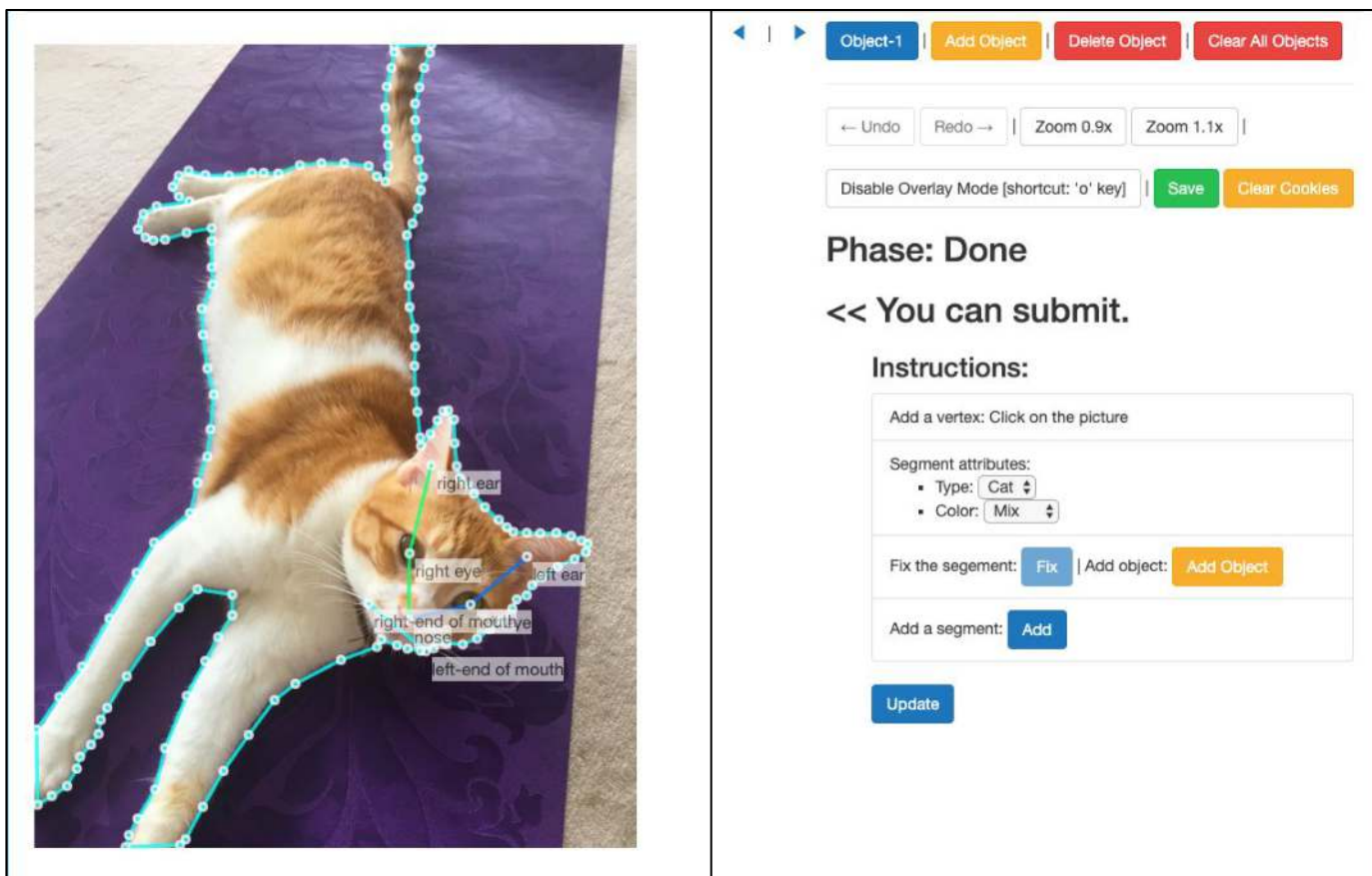
filename	tag1	tag2	tag3	tag4	tag5	tag6
filename_00001.wav	noises	crowd	morning			
filename_00002.wav	people	stormy city	night			
filename_00003.wav	noises	night				



特征点·指定范围·标注标签的工具
Baobab Pose Annotation

所谓Baobab Pose Annotation

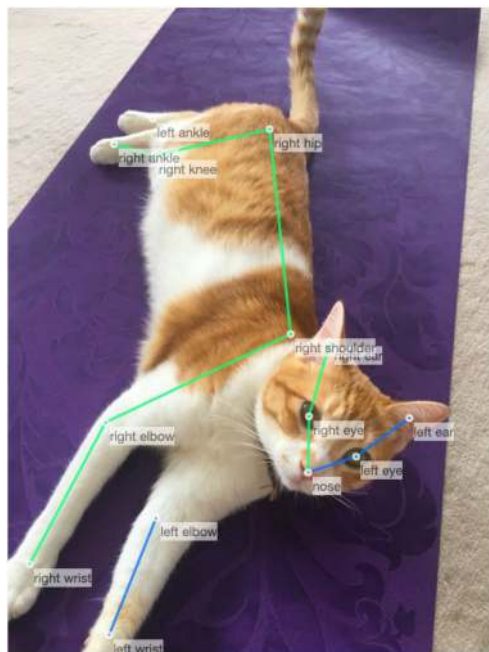
○是可以给对象物添加特征点以及指定范围(Polygon/Rectangle)并标注标签的Web工具



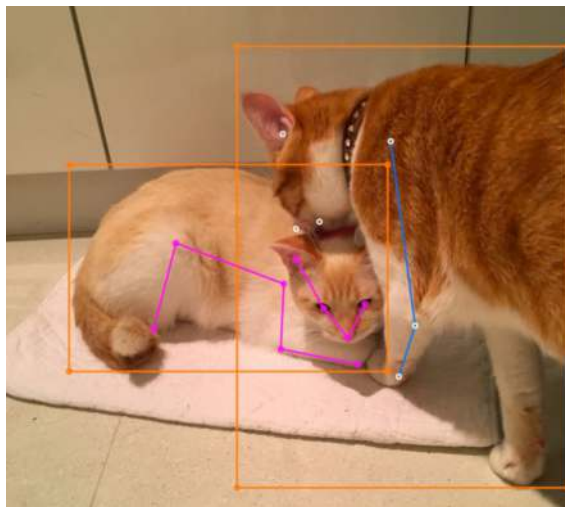
(Baobab Pose Annotation 的作业画面)

Baobab Pose Annotation 能够做的

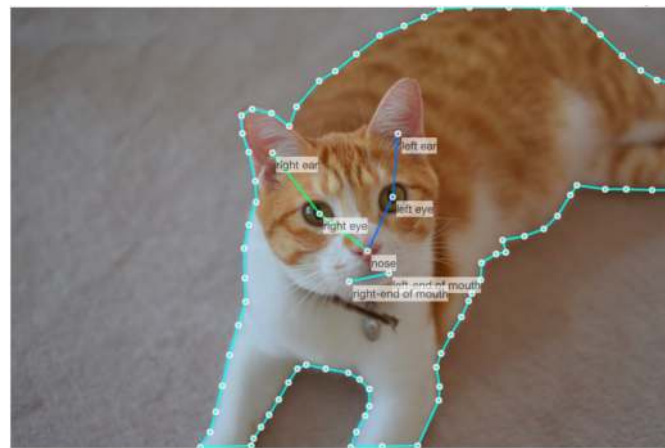
○给对象物添加特征点以及指定范围(Polygon/Rectangle)并标注标签
例如:能够做到对人及动物的脸部(眼耳口鼻)、身体(肩、肘、腕、腰、膝、踝)等的特征点加以指定, 并给对象物指定范围区域。



(只有特征点)



(特征点+指定范围/Rectangle)



特征点+指定范围(Polygon)

(指定特征点及范围的作业画面)

- 可以针对1幅图中多个对象物进行作业。
- 可以付与多个标签(例如: Type: Cat, Color: Mix等)
- 特征点除了脸部以及关节以外, 也可付与于其他所指定的位置上。(例如: 零部件的特定位置)

Baobab Pose Annotation的交货数据

○以CSV格式交货

[CSV文件<特征点, 指定范围(Polygon)]

Image File Name	Key Points	Segmentation
sample_image.JPG	<pre>[{"name":"nose","position":[458.18,421.23]},{"name":"left eye","position":[413.84,338.09]},{"name":"right eye","position":[349.18,437.86]},{"name":"left ear","position":[302.99,219.85]},{"name":"right ear","position":[155.19,406.45]},{"name":"left shoulder","position":[515.45,360.26]},{"name":"right shoulder","position":null},{"name":"left elbow","position":[696.51,530.23]},{"name":"right elbow","position":[580.12,637.39]},{"name":"left wrist","position":[714.98,803.66]},{"name":"right wrist","position":[530.23,859.09]},{"name":"left hip","position":[1030.91,356.57]},{"name":"right hip","position":null},{"name":"left knee","position":[1102.96,521]},{"name":"right knee","position":null},{"name":"left ankle","position":[1265.54,563.49]},{"name":"right ankle","position":[1115.89,587.51]]}]</pre>	<pre>[{"segment":[[55.43,349.18],[125.63,339.94],[199.53,341.79],[227.24,258.65],[229.09,216.16],[208.77,133.02],[219.85,109],[291.91,142.26],[327.01,175.51],[376.89,212.46],[447.1,253.11],[478.5,299.3],[554.25,286.36],[698.36,254.96],[790.73,253.11],[877.56,266.04],[982.87,293.75],[1029.06,299.3],[1029.06,245.72],[1060.46,221.7],[1115.89,221.7],[1130.67,319.62],[1123.28,351.03],[1152.84,415.69],[1173.16,450.79],[1219.35,460.03],[1237.83,476.66],[1291.4,567.18],[1339.44,668.8],[1354.22,726.07],[1337.59,755.63],[1315.42,772.26],[1289.56,764.87],[1245.21,729.76],[1224.89,689.12],[1226.74,600.44],[1182.4,589.35],[1208.27,659.56],[1191.64,711.29],[1158.38,727.92],[1104.81,663.25],[1095.57,604.13],[908.97,618.91],[803.66,600.44],[748.24,585.66],[746.39,679.88],[744.54,775.95],[751.93,831.38],[763.02,886.8],[748.24,908.97],[718.68,945.92],[674.34,958.85],[654.02,912.67],[618.91,884.95],[637.39,822.14],[631.85,763.02],[626.3,727.92],[605.98,783.34],[600.44,864.63],[585.66,942.23],[589.35,984.72],[563.49,993.96],[548.71,1030.91],[487.74,1010.58],[465.57,955.16],[485.89,896.04],[493.28,849.85],[506.22,803.66],[487.74,729.76],[410.15,665.1],[323.31,580.12],[314.08,530.23],[245.72,506.22],[173.67,469.27],[70.21,430.47],[42.49,378.74]]}]</pre>

[CSV文件<特征点, 指定范围(Rectangle), 标签>]

Image File Name	Key Points	Segmentation
sample_image.JPG	<pre>[{"name":"nose","position":[456.64,430.04]},{"name":"left eye","position":[412.31,350.24]},{"name":"right eye","position":[354.67,434.48]},{"name":"left ear","position":[297.04,217.24]},{"name":"right ear","position":[157.39,421.18]},{"name":"left shoulder","position":[560.83,376.84]},{"name":"right shoulder","position":[383.49,534.23]},{"name":"left elbow","position":[709.35,532.01]},{"name":"right elbow","position":[576.35,640.63]},{"name":"left wrist","position":[696.05,811.32]},{"name":"right wrist","position":[536.45,875.6]},{"name":"left hip","position":[1046.29,345.81]},{"name":"right hip","position":null},{"name":"left knee","position":[1090.62,558.61]},{"name":"right knee","position":null},{"name":"left ankle","position":[1241.36,518.71]},{"name":"right ankle","position":null}]</pre>	<pre>[{"segment":[[1363.12,1041.76],[1363.12,115.16],[42.85,115.16],[42.85,1041.76]],"label":"Cat"}]</pre>



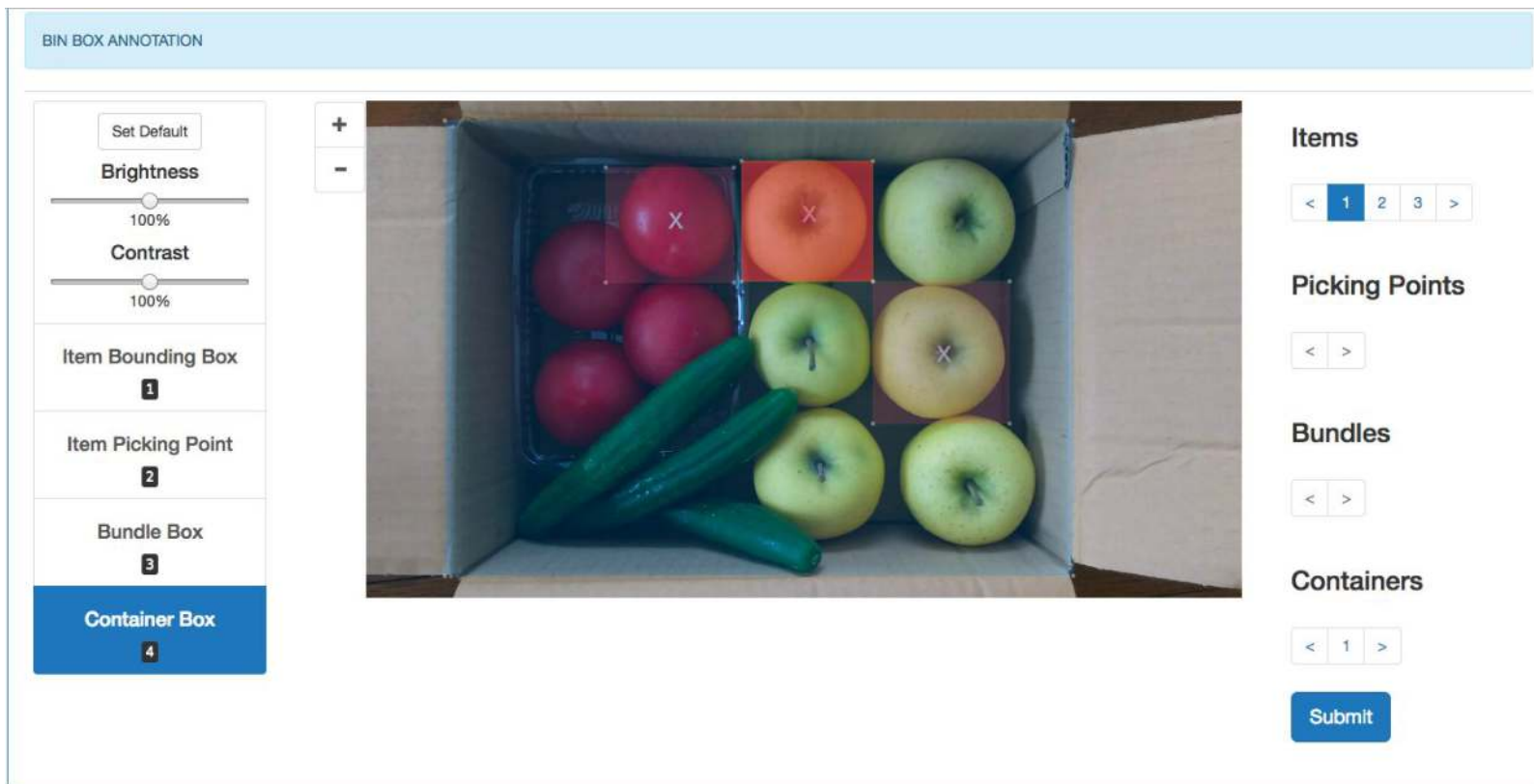


挑选点的图像标注工具

Bin Box Annotation Tool

所谓Bin Box Annotation Tool

○ 是可以给对象物指定范围以及添加挑选点的Web工具

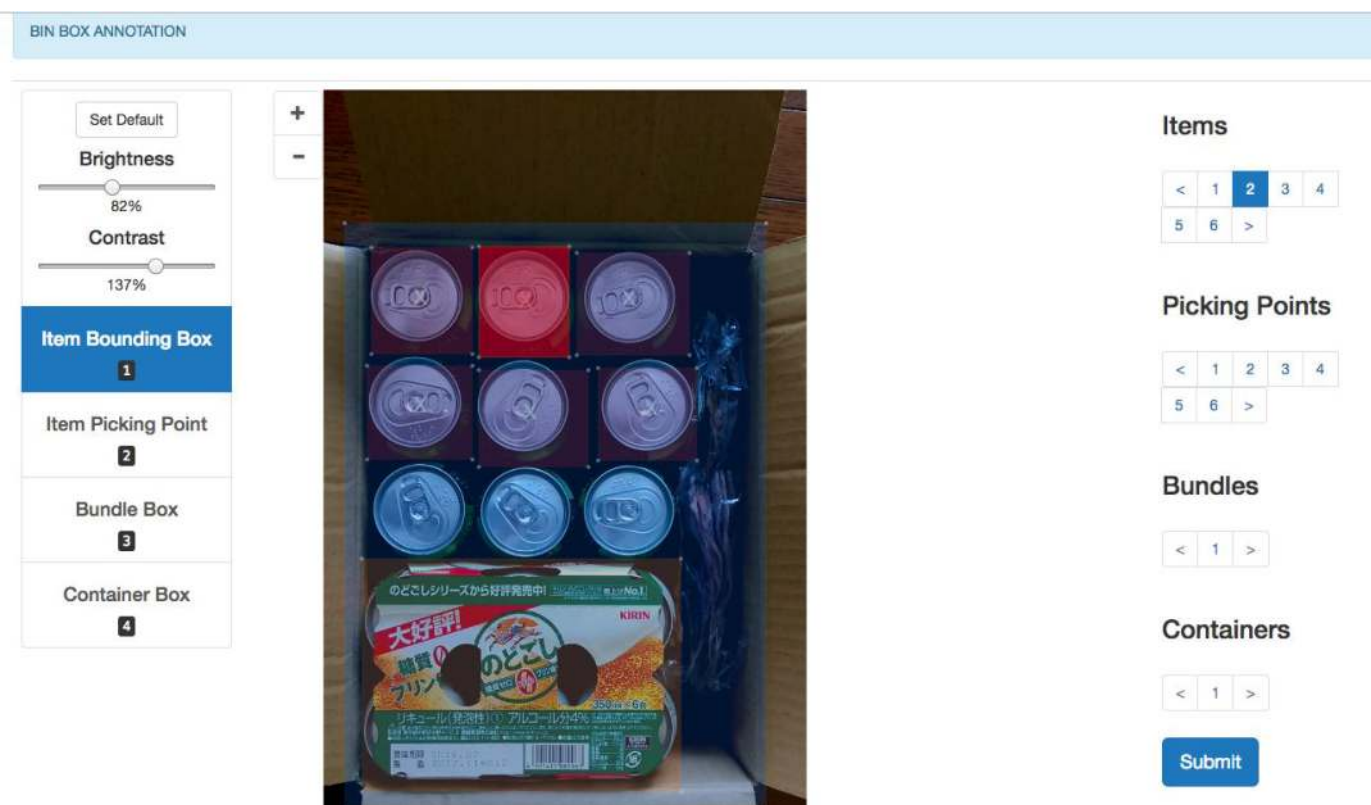


(Bin Box Annotation Tool 的作业画面)

Bin Box Annotation Tool能够做的

○ 给物品指定范围以及添加挑选点

除了给挑选的物品指定范围、添加挑选点之外，也可以对物品箱（**Bundle Box**）、或是已装有物品的盒子（**Bin Box**）进行范围指定。



(Bin Box Annotation Tool 的作业画面)

Bin Box Annotation Tool的交货数据

○以CSV格式交货

[CSV文件]

Image File Name	Item Boxes	Picking Points	Bundle Boxes	Segmentation
sample_image.JPG	[[{"x":401.6,"y":353.5999999999997,"width":110.39999999999998,"height":115.20000000000005}, {"x":472.0000000000006,"y":435.20000000000005,"width":52.79999999999999,"height":123.20000000000005}]]	[[{"x":442.34000396728516,"y":381.2,"width":43.31999206542969,"height":60}, {"x":474.34000396728516,"y":470.8,"width":43.31999206542969,"height":60}, {"x":475.9400039672852,"y":470.8,"width":43.31999206542969,"height":60}]]	[[{"x":544,"y":652.8,"width":129.60000000000002,"height":137.60000000000002}, {"x":686.4,"y":641.6,"width":120,"height":163.1999999999993}, {"x":550.4,"y":584,"width":126.39999999999998,"height":70.39999999999998}, {"x":686.4,"y":606.4,"width":121.60000000000002,"height":40}, {"x":686.4,"y":518.4,"width":120,"height":92.80000000000007}, {"x":556.8,"y":505.6,"width":137.60000000000002,"height":86.39999999999998}, {"x":569.6,"y":444.8,"width":123.1999999999993,"height":64}, {"x":568,"y":345.6,"width":116.7999999999995,"height":94.3999999999998}, {"x":820.8,"y":334.4,"width":129.60000000000002,"height":187.20000000000005}]]	[[{"x":401.6,"y":353.5999999999997,"width":110.39999999999998,"height":115.20000000000005}]]

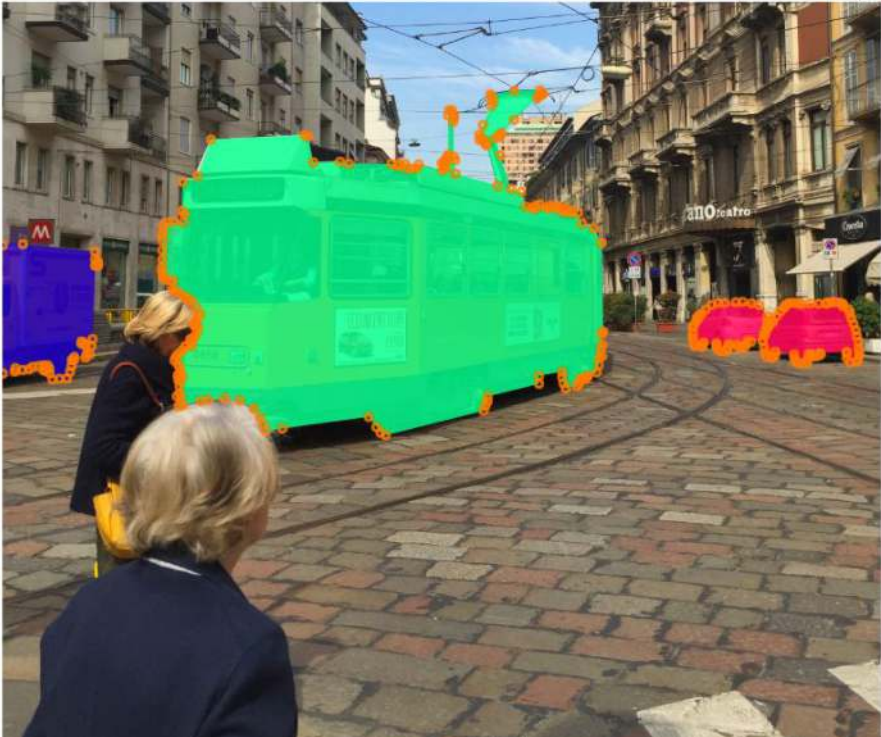


语义分割数据集标注工具
Semantic Segmenter

所谓Semantic Segmenter

- 是能够进行Semantic Segmentation的**Web工具**

File Name: IMG_7262.JPG



View: | | | |

Show Active Only

Segments: | | | | |

| | | | |

Select segmentation label to annotate

Instructions:

Add a vertex: Click on the picture

Fix the segment:

Add a segment (select segment label):

<input type="checkbox"/>	<input type="checkbox"/>	Car
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Train
<input type="checkbox"/>	<input type="checkbox"/>	Truck

(Semantic Segmenter 的作业画面)

Semantic Segmenter能够做的

- 可以给对象物指定范围 (Polygon) 并标注标签。
能够为指定范围的对象物分别标上所指定的颜色。

使用范例：

- 为道路、交通标志、交通工具、人类等的道路图像分别上色
- 为云、天空等的气象图分别上色
- 为山脉、河川、海洋等的航空图像分别上色
- 为重型机械和汽车的零件分别上色



(原始图像)



(图像标注后)

Semantic Segmenter 的交货数据

○以CSV格式交货

[CSV文件]

Image File Name	Segments
IMG_7262.JPG	[[{"polygon":[[482.2,1680.86],[475.49,1672.24],[477.27,1595.66],[516.45,1579.63],[552.07,1483.47],[799.61,1471],[808.95,1475.52],[822.47,1543.13],[893.27,1541.54],[917.13,1547.11],[1029.28,1547.11],[1045.19,1553.47],[1049.17,1548.7],[1065.87,1547.9],[1069.06,1559.04],[1083.37,1560.63],[1096.9,1559.84],[1101.67,1548.7],[1164.51,1565.4],[1168.48,1557.45],[1162.12,1545.52],[1168.48,1545.52],[1173.26,1556.65],[1174.05,1540.74],[1171.67,1535.97],[1178.03,1528.81],[1179.62,1523.25],[1179.62,1419.84],[1182.01,1405.52],[1189.96,1405.52],[1194.73,1418.25],[1195.53,1425.41],[1193.14,1436.54],[1193.94,1528.02],[1197.92,1537.56],[1198.71,1573.36],[1310.07,1605.17],[1281.44,1498.59],[1277.46,1493.81],[1274.28,1485.06],[1262.34,1484.27],[1267.91,1477.91],[1261.55,1469.95],[1271.89,1444.5],[1293.37,1393.59],[1298.93,1381.66],[1294.16,1368.93],[1290.98,1363.36],[1354.61,1354.61],[1422.23,1352.23],[1430.98,1361.77],[1427.79,1364.16],[1423.82,1366.55],[1415.86,1372.91],[1353.82,1430.98],[1321.21,1465.97],[1316.43,1469.16],[1314.05,1477.11],[1304.5,1479.5],[1318.02,1524.84],[1345.86,1613.92],[1372.91,1621.08],[1384.84,1660.06],[1400.75,1664.04],[1410.29,1665.63],[1411.09,1658.47],[1421.43,1654.49],[1440.52,1664.04],[1449.27,1664.04],[1450.07,1658.47],[1468.36,1657.67],[1469.95,1664.83],[1478.7,1669.6],[1485.86,1675.17],[1490.63,1665.63],[1507.34,1671.2],[1508.13,1677.56],[1523.25,1676.76],[1533.59,1705.4],[1564.61,1718.92],[1585.29,1756.31],[1590.06,1990.96],[1585.29,1998.12],[1587.68,2025.96],[1583.7,2037.09],[1586.88,2056.18],[1579.72,2060.16],[1578.13,2080.05],[1572.56,2099.14],[1549.49,2108.68],[1545.52,2110.27],[1543.93,2117.43],[1535.18,2115.84],[1529.61,2115.84],[1526.43,2127.77],[1520.06,2135.73],[1490.63,2142.09],[1484.27,2127.77],[1481.09,2111.86],[1481.09,2097.54],[1419.84,2108.68],[1419.84,2129.36],[1283.82,2162.77],[1283.82,2176.29],[1278.25,2187.43],[1273.48,2200.95],[1014.17,2265.38],[1000.65,2259.02],[989.51,2243.9],[969.63,2216.86],[741.34,2247.88],[696.2254.24],[691.23,2235.95],[680.09,2216.86],[665.77,2195.38],[628.39,2173.91],[588.62,2167.54],[544.87,2171.52],[524.98,2174.7],[475.67,2185.84],[466.92,2188.22],[461.35,2162.77],[472.48,2167.54],[468.51,2154.82],[468.51,2134.93],[465.33,2119.02],[463.73,2107.09],[470.89,2122.2],[474.87,2111.86],[471.69,2100.73],[470.1,2088],[464.53,2077.66],[454.99,2067.32],[459.76,2057.77],[466.92,2049.02],[477.26,2040.27],[484.42,2029.93],[499.53,2028.34],[501.92,2020.39],[497.14,2011.64],[506.69,2006.07],[513.79,1994.97],[518.56,1980.07],[509.62,1975.3],[507.83,1972.32],[512.01,1966.36],[515.58,1954.44],[523.93,1944.31],[512.01,1927.02],[500.68,1910.33],[489.95,1903.18],[482.8,1900.2],[471.47,1891.26],[459.55,1884.11],[450.61,1881.72],[451.21,1857.29],[445.25,1854.9],[430.35,1854.31],[423.79,1845.96],[422,1831.06],[422,1821.52],[423.19,1800.07],[423.19,1776.22],[424.39,1751.19],[422.6,1735.69],[424.39,1730.33],[425.58,1711.25],[436.31,1702.31],[453,1700.53],[478.63,1701.72]],[{"label":"Train","color":"#00ff99"},{"polygon":[[0.93,1762.81],[54.1,1760.01],[245.3,1779.6],[245.3,1800.12],[252.76,1806.64],[252.76,1816.9],[245.3,1816.9],[238.77,2010.91],[209.86,2017.44],[208.93,2023.03],[220.12,2023.03],[220.12,2028.63],[235.97,2029.56],[231.31,2051.01],[222.92,2051.01],[220.12,2060.34],[190.27,2058.47],[189.34,2066.87],[183.74,2066.87],[182.81,2083.66],[179.08,2097.65],[170.68,2115.37],[151.1,2116.3],[132.44,2118.17],[124.98,2101.38],[124.05,2089.25],[119.39,2080.86],[115.66,2094.85],[110.06,2094.85],[108.19,2080.86],[96.07,2082.72],[80.21,2084.59],[69.95,2091.12],[53.16,2092.98],[34.51,2088.32],[32.64,2096.72],[0.93,2102.31]],[{"label":"Truck","color":"#0033cc"},{"polygon":[[2045.06,2044.52],[2043.98,2054.78],[2036.43,2061.25],[2021.32,2057.47],[2017.54,2046.14],[2015.93,2033.73],[2012.15,2016.46],[2014.31,2001.36],[2018.62,1994.88],[2020.78,1984.63],[2027.8,1977.07],[2024.02,1973.3],[2023.48,1965.2],[2033.19,1965.2],[2037.51,1964.66],[2048.3,1950.63],[2059.09,1937.68],[2068.81,1927.97],[2073.12,1920.96],[2080.14,1916.1],[2090.93,1915.56],[2101.72,1915.56],[2109.81,1917.18],[2114.67,1918.26],[2137.87,1917.18],[2160,1917.72],[2181.04,1918.26],[2181.58,1914.48],[2192.37,1913.4],[2205.32,1913.4],[2217.19,1915.02],[2224.21,1918.26],[2224.75,1921.18],[2229.39,1922.92],[2241.99,1912.99],[2245.92,1915.56],[2259.97,1921.18],[2260.92,1927.97],[2260.92,2033.73],[2264.68,2013.51],[2265.76,2025.95],[2266.94,2046.14],[2267.39,2057.47],[2264.14,2066.87],[2269.53,2073.12]]]]





其他 多语言对译脚本制作、评价等
除了上述所介绍的工具体之外，如果您在学习数据的制作上有任何相关需求时，请随时与我们联系。