

[Onions] Instructions

Multi-label Image Classification

Summary of Task

- Given an image of an onion, choose all applicable categories/states. If the image is considerably noisy or the object of specified category cannot be identified, annotate the image as ambiguous. When multiple objects are visible, annotate the most dominant object of the specified category. Note that images are captured in-the-wild and small motion blur, therefore, shouldn't be considered as noise. For green onions, label images as unpeeled and the other categories can be determined similarly to onions.







Labels & Attributes Table




Attribute	Relevant Attributes+Their Option Choices [optional]
State	Raw
State	Cooked
State	Peeled
State	Unpeeled
State	Whole
State	Cut
State	Diced
State	Inhand
State	Outofhand
State	Ambiguous

Annotation Rules




Description	Example
Some attributes are mutually exclusive i.e. can not be simultaneously applicable for the same image	Peeled/Unpeeled (Only one applicable)
Some attributes are mutually exclusive i.e. can not be simultaneously applicable for the same image	Raw/Cooked (Only one applicable)
Some attributes are mutually exclusive i.e. can not be simultaneously applicable for the same image	Whole/Cut/Diced (Only one applicable)
Some attributes are mutually exclusive i.e. can not be simultaneously applicable for the same image	Inhand/Outofhand (Only one applicable)
Noisy Images with blur or occlusion can be skipped	Ambiguous category is applicable

Common Edge Cases

Edge Case	How to Handle It	Example
Cut/Diced	Size of the pieces matters (Cut examples)	 
Cut/Diced	Size of the pieces matters (Diced Examples)	 
More than one mutually exclusive state is applicable	<p>Pick the most dominant one (centered).</p> <p>Image on the right has both cut and chopped states applicable, so we pick “chopped” because that is the most dominant one and also at the center of the image.</p>	
Inhand/Outofhand and	<p>When the hand is touching the object while dicing and other objects are visible</p> <p>If most of the onions are out of hand, then label as outofhand, otherwise inhand.</p> <p>Image on the right is labelled as outofhand</p>	

Inhand/Outofhand and	<p>When the hand is touching the object while dicing and other objects are visible</p> <p>If most of the onions are out of hand, then label as outofhand, otherwise inhand.</p> <p>Image on the right is labelled as inhand</p>	
Green Onions	<p>Label green onions always as unpeeled</p> <p>The image on the right is therefore labelled as: Unpeeled, whole, inthehand</p>	
Green Onions	<p>Cut/Diced Distinction</p> <p>Mostly diced applicable unless cut in half.</p> <p>Image on the right should be labelled as “Unpeeled, Diced, Outofhand and Uncooked”</p>	

Labels & Attributes Description/Examples

Labels/Attributes	Description	Example
State	Raw : (Uncooked state before going into a cooking vessel)	  

State	Cooked : (Cooked state, in the pan or on a plate after being cooked)	 
State	Peeled : (Applicable during and after peeling)	   
State	Unpeeled : (Applicable before peeling)	 
State	Whole : (Before cutting/chopping)	 

State	Cut : (After or during cutting)	 
State	Diced : (Similar to cutting but applicable when the pieces are very small)	   
State	Inhand : (When hand is grasping the object)	  
State	Outofhand : (When the object is not in grasp)	    

State	Ambiguous (Occlusion, blur, object not visible)	 
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