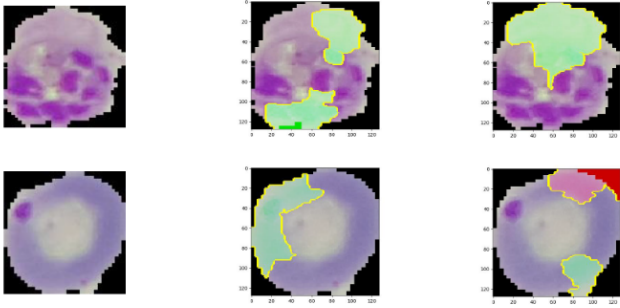
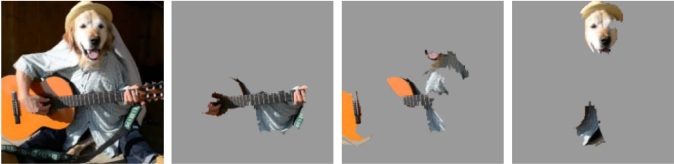


Survey

Title	Domain	Abstract
An image is worth 16x16 words	general	images -> patches -> flattening (not conv) -> linear PE -> multihead attn -> classification head lower scores than Resnet
Transparency and Trust in Human-AI-Interaction: The Role of Model-Agnostic Explanations in Computer Vision-Based Decision Support	XAI + CV	malaria detection in cell kaggle dataset LIME local interpretable agnostic explanations (python library) <div>Original Input Image (Class Parasitized) CNN LIME (Class Parasitized) MLP LIME (Class Parasitized)</div> 
"Why Should I Trust You?" Explaining the Predictions of Any Classifier	XAI	 <div>(a) Original Image (b) Explaining <i>Electric guitar</i> (c) Explaining <i>Acoustic guitar</i> (d) Explaining <i>Labrador</i></div> medium article

Title	Domain	Abstract
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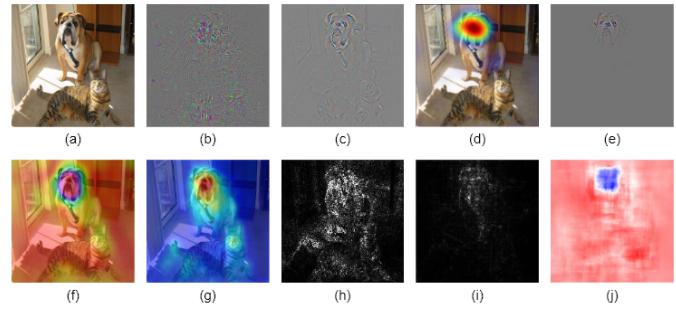


Figure 1: Visualizing attribution-based XAI methods' outputs for 'dog' class: (a) original input image, (b) backpropagated gradients, (c) guided backpropagation, (d) Grad-CAM, (e) guided Grad-CAM, (f) Score-CAM, (g) FullGrad, (h) Integrated Gradients, (i) SmoothGrad, and (j) occlusion sensitivity map.

Attribution-based XAI Methods
in Computer Vision: A Review

XAI

attribution based methods :

gradient-based method -> generated saliency maps, DeConvNet, pixels responsible for activation, gap, cam

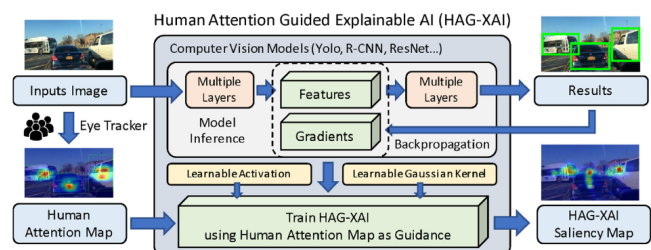
perturbation-based methods -> change in network output on few deviations, adversarial perturbation (not seen by human but cause major changes), model weights not required, RISE

contrastive methods -> contrastive explanation method (CEM), CDeepEx needs model's para & latent space

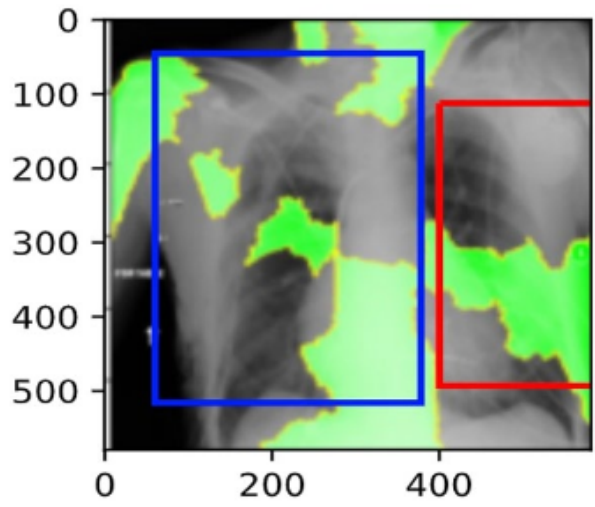
vision models look at diff place than those of humans

Human attention guided
explainable artificial intelligence
for computer vision models

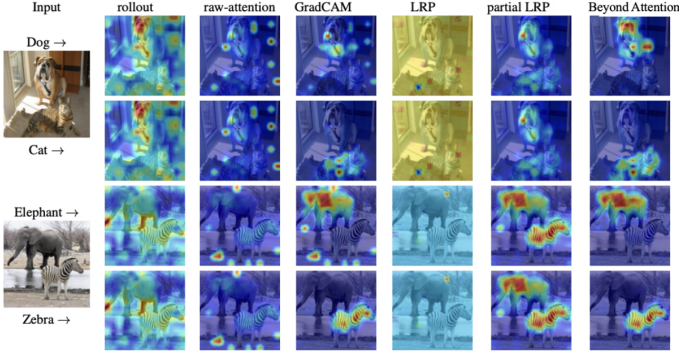
HAG-XAI



eye tracker for human attn, used learnt kernel and activations for vision model

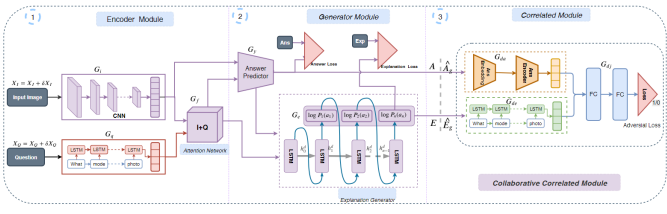
Title	Domain	Abstract
ViT: Quantifying Chest X-Ray Images Using Vision Transformer & XAI Technique	ViT + XAI	 <p>LIME, bounding box formulation</p>

Explainability of Vision Transformers	ViT + XAI	
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Title	Domain	Abstract
		
		CIFAR, ImageNet

XAI Benchmark for Visual Explanation	Benchmarks	Datasets for XAI + Vision
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<p>X-Vision: Explainable Image Retrieval by Re-Ranking in Semantic Space</p>	<p>Image Retrieval XAI</p>	<pre> input : q = Query Image, Result from Base Ranker, $D = \{d_1, d_2, \dots, d_k\}$ output : Result after Re-Ranking $\{d_1', d_2', \dots, d_k'\} \in D'$ 1 <i>class_labels</i> = list of class labels possible for the dataset 2 let f be a function, where given an image as input, it returns n-dimensional vector where each dimension counts the incidence of each type of N objects, where $N = \text{length}(\text{class_labels})$. 3 $qv = f(q)$ 4 for $i \leftarrow 1$ to k do 5 $di'v = f(di')$ 6 $\text{object_similarity} = \text{cosine}(qv, di'v)$ 7 for $\text{class_type} \leftarrow 1$ to n do 8 if di' and q both contains $\text{class_labels}[\text{class_type}]$ type object then 9 $\text{color_similarity}[\text{class_type}] = \text{rerank_color_similarity}(di', q, \text{class_labels}[\text{class_type}])$ 10 $\text{size_similarity}[\text{class_type}] = \text{rerank_size_similarity}(di', q, \text{class_labels}[\text{class_type}])$ 11 end 12 end 13 end 14 <i>Return</i> D' by sorting based on total similarity scores </pre> <p>Algorithm 1: Re-ranking algorithm</p>
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<p>Robust Explanations for Visual Question Answering</p>	<p>VAQ + XAI</p>	
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Visual Question and Answering Dataset		
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