cases	doc_1	doc_2	decision	id
	<table><tr><td>**authors**</td><td>• Jie Yang • Dong Wang • Huchuan Lu • Hongyu Wang • Baocai Yin</td></tr><tr><td>**title**</td><td>Learning Uncertain Convolutional Features for Accurate Saliency Detection</td></tr><tr><td>**publication_date**</td><td>2017-10-01 00:00:00</td></tr><tr><td>**source**</td><td>SupportedSources.OPENALEX</td></tr><tr><td>**journal**</td><td>International Conference on Computer Vision</td></tr><tr><td>**volume**</td><td></td></tr><tr><td>**doi**</td><td>10.1109/iccv.2017.32</td></tr><tr><td>**urls**</td><td>• https://openalex.org/W2963906836 • https://doi.org/10.1109/iccv.2017.32 • http://arxiv.org/pdf/1708.02031</td></tr><tr><td>**id**</td><td>id-7456455294264652317</td></tr><tr><td>**abstract**</td><td></td></tr><tr><td>**versions**</td><td></td></tr></table>	<table><tr><td>**authors**</td><td>• Pingping Zhang • Dong Wang • Huchuan Lu • Hongyu Wang • Baocai Yin</td></tr><tr><td>**title**</td><td>Learning Uncertain Convolutional Features for Accurate Saliency Detection</td></tr><tr><td>**publication_date**</td><td>2017-08-07 08:18:04+00:00</td></tr><tr><td>**source**</td><td>SupportedSources.ARXIV</td></tr><tr><td>**journal**</td><td>None</td></tr><tr><td>**volume**</td><td></td></tr><tr><td>**doi**</td><td></td></tr><tr><td>**urls**</td><td>• http://arxiv.org/pdf/1708.02031v1 • http://arxiv.org/abs/1708.02031v1 • http://arxiv.org/pdf/1708.02031v1</td></tr><tr><td>**id**</td><td>id-1984452673837493034</td></tr><tr><td>**abstract**</td><td>Deep convolutional neural networks (CNNs) have delivered superior performance in many computer vision tasks. In this paper, we propose a novel deep fully convolutional network model for accurate salient object detection. The key contribution of this work is to learn deep uncertain convolutional features (UCF), which encourage the robustness and accuracy of saliency detection. We achieve this via introducing a reformulated dropout (R-dropout) after specific convolutional layers to construct an uncertain ensemble of internal feature units. In addition, we propose an effective hybrid upsampling method to reduce the checkerboard artifacts of deconvolution operators in our decoder network. The proposed methods can also be applied to other deep convolutional networks. Compared with existing saliency detection methods, the proposed UCF model is able to incorporate uncertainties for more accurate object boundary inference. Extensive experiments demonstrate that our proposed saliency model performs favorably against state-of-the-art approaches. The uncertain feature learning mechanism as well as the upsampling method can significantly improve performance on other pixel-wise vision tasks.</td></tr><tr><td>**versions**</td><td></td></tr></table>	DUPLICATES	178