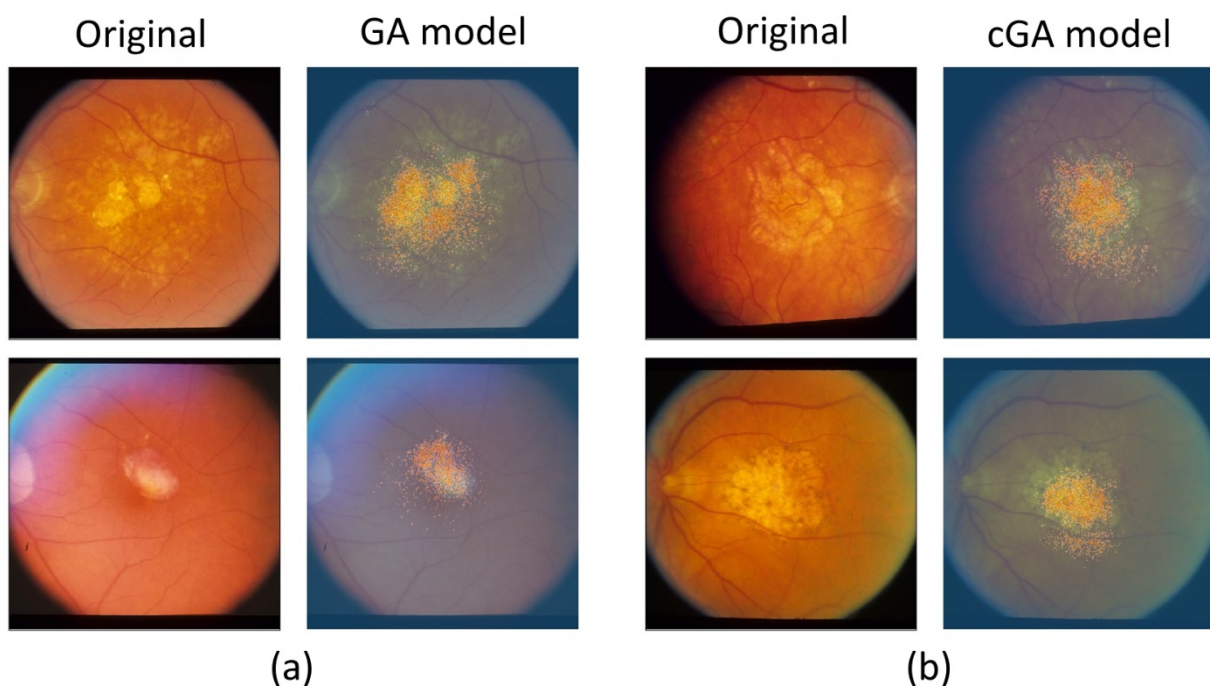


## Supplement

### *Saliency maps*

To visualize important areas in the color fundus images (i.e., those areas that contributed most towards classification), we applied image-specific class saliency maps to assess manually whether the deep learning models were concentrating on image areas that human experts would consider the most appropriate to predict geographic atrophy (GA) or central GA<sup>1</sup>. The saliency map is widely used to represent the visually dominant location in a given image; it helps highlight areas used by the deep learning algorithm for prediction and can also provide insight into misclassified images. For example, the areas highlighted in the accompanying figure are indeed areas with GA and central GA that are visually apparent in the color fundus images.

Figure. Representative color fundus photos (first column) side-by-side with overlaid saliency maps (second column), generated by applying keras-vis<sup>2</sup> to (a) the geographic atrophy (GA) model and (b) the central geographic atrophy (CGA) model.



## References

1. Simonyan K, Vedaldi A, Zisserman A. Deep inside convolutional networks: Visualising image classification models and saliency maps. *arXiv preprint arXiv:13126034*. 2013.
2. Kotikalapudi, Raghavendra, al. e. Keras-vis. 2017; <https://github.com/raghakot/keras-vis>.