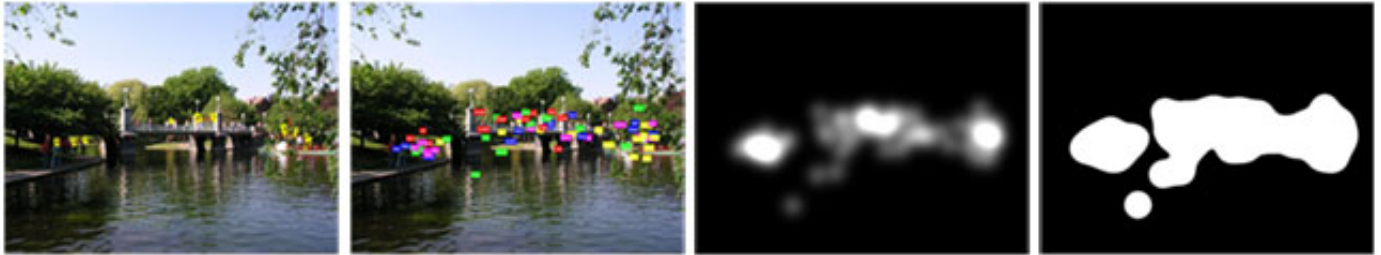


learning to predict where humans look

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abstract

For many applications in graphics, design, and human computer interaction, it is essential to understand where humans look in a scene. Where eye tracking devices are not a viable option, models of saliency can be used to predict fixation locations. Most saliency approaches are based on bottom-up computation that does not consider top-down image semantics and often does not match actual eye movements. To address this problem, we collected eye tracking data of 15 viewers on 1003 images and use this database as training and testing examples to learn a model of saliency based on low, middle and high-level image features. This large database of eye tracking data is publicly available with this paper.

see the fixations

files

Paper	PDF (7 MB)
Posters	ICCV Poster (18 MB), Teaser poster (9 MB)
Slides	PDF (24.2 MB), Keynote (55.4 MB)
Eye tracking database	Readme , Code , ImageStimuli , Eye tracking Data , Human Fixation Maps
Our saliency model	Readme , Code (4.1MB), Saliency Maps of our images from our model
Train and test a new model	Readme , Code (6.9MB)

related videos

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bibtex

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@InProceedings{Judd_2009,  
  author    = {Tilke Judd and Krista Ehinger and Fr{\'e}do Durand and Antonio Torralba},  
  title     = {Learning to Predict Where Humans Look},  
  booktitle = {IEEE International Conference on Computer Vision (ICCV)},  
  year      = {2009}  
}
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