## Are you winking at me? (5) [Day 9 of 17]

"Adrian at PylmageSearch" <adrian@pyimagesearch.com>

收件人:navicester@163.com

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附件:

Are you as obsessed with TV sitcoms as I am?

I can't think of a wink without picturing Lucille Bluth from Arrested Development.



And here is another random fact about me: I've always liked to read before bed. Back in 2016, when my fiancée was reading *The Girl on the Train*, I was spending my evenings reading a backlog of CV and DL papers (I like to make sure I'll always have something fun to talk about at parties!).

One of them that really caught my eye (pun intended ③) was *Real-Time Eye Blink Detection Using Facial Landmarks*, which was every bit as compelling as it sounds.

No, seriously!

This paper proposed a metric called the eye aspect ratio (EAR) — which I find quite ironic that we are using something called an "EAR" to compute a metric for an "eye".

We'll be using the EAR in today's lesson — which is all about (wait for it...)



## ...using facial landmarks to detect eye blinks in real time.



Traditional image processing techniques for detecting eye blinks were fairly complex and involved, and solved the problem of blink detection in a fairly roundabout way.

Using the EAR is an *elegant* solution that is *easy to implement*. Once you know how to detect eye blinks, you'll be all ready for tomorrow's lesson — which is a *highly useful* application of computer vision to a *very* big real-world problem.

Adrian Rosebrock
Chief PylmageSearcher

P.S. If you're interested in digging deeper into computer vision + facial applications (such as face recognition), you should take a look at the **PylmageSearch Gurus course**, which includes a deep dive into algorithms such as Eigenfaces, LBPs for face recognition, and deep learning facial embeddings — all the tools and skills you need to start building your own facial recognition applications.

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Our postal address: PO Box 17598 #17900, Baltimore, MD 21297-1598