Image classification: A (new) statistical viewpoint

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In this talk we consider supervised binary image classification. We introduce a (idealized) statistical model based on grayscale images where each image is subject to some random scaling and random dilation. We discuss different approaches to solve our classification problem. Interestingly, all classifiers improve with increasing dimension d and are able to perfectly separate classes. Our new perspective on an image classification problem helps us not to be affected by the curse of dimensionality.

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