

## **Common themes in object detection and recognition in visual and acoustic scenes**

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I will describe a family of computationally efficient algorithms for object detection and recognition in visual and acoustic scenes. All object models and classifiers are based on binary local features designed to accommodate invariance to intensity modulation and local object deformations. In both visual and acoustic scenes (spectrograms) these are defined as simple binary functions of contrast invariant oriented edges. I will outline some ideas as to how these algorithms may be integrated into a general approach to scene analysis, and outline some important open questions arising within the framework suggested by this approach.