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## Obtaining highly localized edges using phase congruency and ridge detection

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### ABSTRACT

Edge localization is an important factor when choosing between various image feature extraction techniques. Lesser edge displacement means more accurate results, and this is the aim of most edge detectors. We present a novel algorithm for obtaining highly localized edges from grayscale images, based on an analogy between phase congruency maps and digital elevation models. In the first step, phase congruency is used to obtain an initial edge map, which is then processed in a second step by a modified ridge-detection algorithm in order to obtain an increased edge localization.

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