ABSTRACT:
Recent developments of hardware capabilities on mobile devices have made Location Based Services (LBS) very popular. This triggered an increasing need of rich visual content in mobile guide applications.

This paper presents two original approaches for using representative visualizations: artistic views which represent an arbitrary deformation made by an artist and perspective views (3D-like) obtained from 3D models. Both approaches are based on learning GPS-to-image relations. We show an efficient use of the thin-plate spline for registering GPS coordinates with images. We also show the implementation of our guiding system on two mobile platforms.