

## **Towards Update a Road Map Solution: Use of Information Obtained by the Extraction of Road Network and Its Nodes from a Satellite Image**

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**Abstract :** In this paper, we present a new approach for extracting roads, there road network and its nodes from satellite image representing regions in Algeria. Our approach is related to our previous research work. It is founded on the information theory and the mathematical morphology. We therefore have to define objects as sets of pixels and to study the shape of these objects and the relations that exist between them. The main interest of this study is to solve the problem of the automatic mapping from satellite images. This study is thus applied for that the geographical representation of the images is as near as possible to the reality.

**Keywords :** nodes, road network, satellite image, updating a road map

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