

## عنوان مقاله:

Prediction of urban growth with using cellular automata and genetic algorithm

## محل انتشار:

کنفرانس بین المللی جامعه و محیط زیست (سال: 1397)

تعداد صفحات اصل مقاله: 10

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## خلاصه مقاله:

Rapid development and lead to improper cities without planning and unbridled construction that can be problems in different areas of application, such as environmental, economic and cultural created. Therefore, modeling and predicting urban growth can help planners and decision makers to understand the city s vision for sustainable urban growth. In this research, we tried to model the horizontal growth of Tehran for 2014 using cellular automata in combination with genetic algorithm. To investigate the effects of neighborhood filtering and spatial resolution on the modeling results, different values were used. Finally, the 3×3 neighboring filter and the 30 meters spatial resolution capability had more accurate results. The accuracy of the results of the proposed model for 2014 modeling is best with kappa index and overall accuracy of 0.801 and 0.891. Finally, the proposed method was used to predict Tehran .city growth plan for 2024

## کلمات کلیدی:

Urban Growth, Cellular Automata, Genetic Algorithm

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/815659>

