Predicting the Physical Development of the City with the Automated Fuzzy Cell Method (Case Study :Mashhad City)

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The rapid and uncontrolled expansion of cities has led to unplanned construction. In this way, modeling and predicting the behavior of the city helps decision-makers. In this study, the aspect of sustainable urban Development ,has been studied the of Mashhad, and finally, the prediction of urban behavior is one of the important. In this research, using the cellular automaton (ca) model developed for the basis of spatial information system (GIS) and presenting a simple and powerful model simulation of complex urban processes has been done. Using satellite images of Land sat (2002) + Land Sat 8(2018) and artificial neural network ,The proposed model has a better performance compared to Classic models .The main reason is the increase in the flexibility of this model in the face of incompletely information.

Keywords : Urban Modeling, Sustainable Development, Fuzzy Cellular Automation, Spatial Information System

Biography

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