

[IEEE.org](#) | [IEEE Xplore Digital Library](#) | [IEEE Standards](#) | [IEEE Spectrum](#) | [More Sites](#)[Institutional Sign In](#)[BROWSE](#)[MY SETTINGS](#)[GET HELP](#)[WHAT CAN I ACC](#)[Basic Search](#)[Author Search](#)[Publication Search](#)[Browse Early Access Articles > Cybernetics, IEEE Transaction ...> Volume:PP Issue:99](#)

Irregular Cellular Learning Automata

2
Author(s)

Esnashari, M. ; Information Technology Department, Iran Telecommunications Research Center, T

[Abstract](#)[Authors](#)[References](#)[Cited By](#)

Cellular learning automaton (CLA) is a recently introduced model that combines cellular automaton (CA) and learning automaton (LA). The basic idea of CLA is to use LA to adjust the transition probability of stochastic CA. This model has been used to solve problems in resource assignment in cellular networks, call admission control, image processing, and antenna integration placement. In this paper, an extension of CLA called irregular CLA (ICLA) is proposed. This extension is obtained by removing the structure regularity assumption in CLA. The structure of ICLA is needed in some applications, such as computer network and distributed computing. The concept of expediency has been introduced for ICLA and the conditions under which an ICLA becomes expedient are analytically found.

Published in:

Cybernetics, IEEE Transactions on (Volume:PP , Issue: 99)

Page(s):

1

Date of Public

01 October 201

ISSN :

2168-2267

Sponsored by

Systems, Man,
Society

DOI:

10.1109/TCYB.2014.2356591

Publisher:

IEEE

IEEE Account

- » Change Username/Password
- » Update Address

Purchase Details

- » Payment Options
- » Order History
- » Access Purchased Documents

Profile Information

- » Communications Pr
- » Profession and Edu
- » Technical Interests

[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [Sitemap](#) | [Privacy & Opting Out of Cookies](#)

A not-for-profit organization, IEEE is the world's largest professional association for the advancement of technology.

© Copyright 2014 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.