

DETERMINISTIC TRAFFIC MODELS USING ONE DIMENSIONAL CELLULAR AUTOMATA

ARAVINDAN ANBARASU

Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India

ABSTRACT

The paper briefly discusses two deterministic traffic cellular automata models, wolfram rule 184 and deterministic fukui-ishibashi traffic cellular automata. The paper with an introduction to cellular automata which is used for various kinds of modeling also explains one dimensional binary state cellular automata and wolfram numbers in detail. The paper also describes the basics of traffic flow modeling using cellular automata, wolfram rule 184, deterministic fukui-ishibashi traffic cellular automata models and their application to automated freeway traffic situations.

KEYWORDS: Cellular Automata, Wolfram Number, Wolfram Rule 184, Deterministic Fukui-Ishibashi Model