

KNOWLEDGE PROCESSING USING FUZZY COGNITIVE MAPS

W.B.Vasantha Kandasamy and Yasmin Sultana

In this paper we introduce a new notion called Fuzzy relational maps (FRMs). They are constructed analogous to FCMs described by Bart Kosko. In FCMs we promote the correlation between causal associations among concurrently active units. But in FRMs we divide the very causal associations into two disjoint units. Thus the very set of nodes is divided into two sets range space R and the domain space D . A FRM is a directed graph or a map from D to R with concepts like policies or events etc as nodes and causalities as edges. It represents causal relation between spaces D and R .

We define for FRM the fixed point, limit cycle and the methods of obtaining the hidden pattern.

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e-mail: vasantha@iitm.ac.in
web: <http://mat.iitm.ac.in/~wbv>