# A Survey on Applied Research of Soft Computing for Hydrology in China

PING AI

College of Hydrology and Water Resources,Hohai Univ., Nanjing, 210098, China (aip@hhu.edu.cn)

Abstract: The applied research of soft-computing for hydrology is one of the new topics. In view of the characteristics of indetermination and non-linear in the hydrological systems, the modeling technologies represented by the artificial neural network algorithms and the artificial intelligence optimization technologies represented by the genetic algorithms have become hot issues; what's more, the application of chaos theory to the research of the complexity in hydrological system is a breakthrough in hydrologic research. However, the applied research of the soft computing in the hydrology field is also at the exploration stage in China.

In this paper, we review that the applied research of the Artificial Neural Networks, Chaos and Genetic Algorithm in the hydrology in China, and made a brief discussions about basal principle and probability for application of these algorithms.

Keywords: soft computing; hydrology; applied research; review