



**University of Otago**

Te Whare Wananga o Otago  
Dunedin, New Zealand

---

**Looking for a new AI paradigm: Evolving  
Connectionist and Fuzzy Connectionist Systems –  
Theory and Applications for Adaptive, On-line  
Intelligent Systems**

Nikola Kasabov

---

**The Information Science  
Discussion Paper Series**

Number 98/03  
March 1998  
ISSN 1177-455X

## **University of Otago**

### **Department of Information Science**

The Department of Information Science is one of six departments that make up the Division of Commerce at the University of Otago. The department offers courses of study leading to a major in Information Science within the BCom, BA and BSc degrees. In addition to undergraduate teaching, the department is also strongly involved in postgraduate research programmes leading to MCom, MA, MSc and PhD degrees. Research projects in software engineering and software development, information engineering and database, software metrics, knowledge-based systems, natural language processing, spatial information systems, and information systems security are particularly well supported.

### **Discussion Paper Series Editors**

Every paper appearing in this Series has undergone editorial review within the Department of Information Science. Current members of the Editorial Board are:

Assoc. Professor George Benwell  
Dr Geoffrey Kennedy  
Dr Martin Purvis  
Dr Henry Wolfe

Assoc. Professor Nikola Kasabov  
Dr Stephen MacDonell  
Professor Philip Sallis

The views expressed in this paper are not necessarily the same as those held by members of the editorial board. The accuracy of the information presented in this paper is the sole responsibility of the authors.

### **Copyright**

Copyright remains with the authors. Permission to copy for research or teaching purposes is granted on the condition that the authors and the Series are given due acknowledgment. Reproduction in any form for purposes other than research or teaching is forbidden unless prior written permission has been obtained from the authors.

### **Correspondence**

This paper represents work to date and may not necessarily form the basis for the authors' final conclusions relating to this topic. It is likely, however, that the paper will appear in some form in a journal or in conference proceedings in the near future. The authors would be pleased to receive correspondence in connection with any of the issues raised in this paper, or for subsequent publication details. Please write directly to the authors at the address provided below. (Details of final journal/conference publication venues for these papers are also provided on the Department's publications web pages: <http://divcom.otago.ac.nz:800/COM/INFOSCI/Publictns/home.htm>). Any other correspondence concerning the Series should be sent to the DPS Coordinator.

Department of Information Science  
University of Otago  
P O Box 56  
Dunedin  
NEW ZEALAND  
Fax: +64 3 479 8311  
email: [dps@infoscience.otago.ac.nz](mailto:dps@infoscience.otago.ac.nz)  
www: <http://divcom.otago.ac.nz:800/com/infosci/>