

**AN ANALYSIS OF MALAYSIAN COMPUTER SCIENCE AND  
INFORMATION TECHNOLOGY RESEARCH PUBLICATIONS IN  
SELECTED INTERNATIONAL DATABASES**

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## ABSTRACT

This study analysed Malaysian computer science and information technology research works published within the period 1990 and 1998. The data was collected from three international CD-ROM databases, i.e., *COMPENDEX* (1987-1999), *IEL (IEE/IEEE Electronic Library)* (1988-1999), and *INSPEC* (1990-1998). The search contributed a total of 389 bibliographic records. Malaysian research contribution in the fields of computer science and information technology between 1990 and 1998 indicated two stages of development, i.e., the exploration period from 1990 to 1994 and the rapid growth period during 1995 to 1998. The most productive period of research publication was 1997. The continuing upward trend in publication production in the future was revealed. A total of 458 unique Malaysian authors contributed the 389 publications in computer science and information technology during 1990 to 1998. The collaboration between two authors was the dominant authorship pattern. A positive correlation between productivity and collaboration at the author level was revealed. The authors of the research works published were affiliated to a few institutions. The positive correlation between the size of the research group and productivity was verified. Proceedings were the primary channel of research communication. The distribution of Malaysian conference papers was concentrated in a few proceedings published in seventeen countries or regions. The most active research subject areas involved in simulation system, control engineering, computer assisted instruction (CAI), programming techniques, expert system, asynchronous transfer mode (ATM), image processing, software engineering and digital signal processing & applications.

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