

Special Issue on Parallel Architectures and Algorithms

Guest Editor's Introduction

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Received March 15, 1987

1. THE CONFERENCE

The International Conference on Parallel Processing is an outgrowth of the Sagamore Computer Conference on Parallel Processing. The first Sagamore Conference was held in 1972. The name of the conference was changed, in 1975, to The International Conference on Parallel Processing. Thus, 1987 was the 16th year for the conference. In the 16 years since its inception, the conference has grown considerably. In 1972, there were 17 technical presentations and about 90 participants [1]. All of these were invited. In 1987, there were 174 technical presentations. All were selected through a rigorous reviewing process. The papers on which these presentations were based are included in the proceedings of the conference [3]. There were over 600 participants at the 1987 conference. The tremendous growth in the research activities related to parallel processing is evident in the increased number of submissions to the conference and in the increased attendance at the conference.

2. THE PAPERS IN THIS ISSUE

The conference included numerous technical sessions on compiler techniques, parallel algorithms and data structures, logic programming systems, parallel architectures, programming languages, software support, interconnection networks, image processing, systolic computing, and hypercube computing. Because of space limitations, it is not possible to demonstrate, in this special issue, the breadth of topics covered at the conference. This special issue contains only 5 of the 174 papers presented at the conference. Some of

