

Preface

This conference report is the results of the International Conference on Fifth Generation Computer Systems 1988 (FGCS '88) which was held for five days, from November 28 to December 2, 1988.

The Japanese Fifth Generation Computer Project, with ICOT as the core, began in 1982 and is currently proceeding on schedule.

We have reached the final year of the intermediate stage (1985-88). Based on the many research results achieved through basic technological development during the initial stage, research and development is being conducted on a main subsystem which will form the fifth generation computer prototype.

This is the background for our third conference, FGCS '88, which was preceded by FGCS '81 and FGCS '84. The purpose of this latest conference was to present the status and results of intermediate stage research results, as well as to assemble noted scholars, first-class researchers, and important members of corporations and government agencies from around the world in order to have presentations of research results and to exchange opinions.

FGCS '88 was held for five days. The first two days were devoted to a summary of ICOT research and development, panel discussions by participants in domestic and international projects, invited lectures by noted scholars, and so on. The final three days consisted of presentations of invited papers and submitted papers during technical sessions, panel discussions, and a deepening of the discussion concerning the most advanced fields related to the research and development of fifth generation computers.

In addition, a number of demonstrations connected with intermediate stage research results were given. Included among them were demonstrations of the Multi-PSI system which can be configured with up to sixty-four processing elements (PEs) and the Parallel Inference Machine Operating System (PIMOS) which runs on the Multi-PSI.

I am sure that you will find this document valuable for understanding the current status of fifth generation computer research and development in Japan, and will come to consider it of even more worth because it allows a grasp of the developments in the most advanced fields related to FGCS throughout the world.

I would like to offer here my great thanks and appreciation for the help given in preparation for this international conference, especially for the cooperation and guidance of the Ministry of International Trade and Industry, related agencies, the members of the organizing committee, and all others associated with the project.

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