Charles R. Weisbin, editor

Artificial Intelligence Applications

The Engineering of Knowledge-Based Systems

Proceedings of the Second Conference, Miami Beach, Florida, December 11-13, 1985



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Welcome to the IEEE Computer Society's Second Conference on Artificial Intelligence Applications—The Engineering of Knowledge-Based Systems. We have emphasized knowledge-based systems in this conference because of their leading role in applied artificial intelligence. Other important areas of application such as vision, robotics, learning, man-machine interfaces, and natural language processing are also included. The papers presented here reflect this vision of applied artificial intelligence technology. Theoretical papers that advance the basic technical capabilities in these fields have also been included in the program.

This year, as befits an applications conference, we are proud to have our first exhibition. We hope you will enjoy browsing through the exhibits and will find many useful new products.

Many thanks are due to Charles R. Weisbin, my program chairman, for his hard work and dedication to the conference. It has been a pleasure working with him. I would also like to thank Mabry Tyson for putting together such an appropriate set of tutorials.

John Roach

Program Chairman's Message



It is with a great deal of pride and pleasure that I present this proceedings of the Second Conference on Artificial Intelligence Applications—The Engineering of Knowledge-Based Systems. This proceedings reflects directly the intensive effort and diligent review of an outstanding program committee; without the program committee's conscientious effort, this conference could not have accommodated the large number of submitted papers, attracted such outstanding invited speakers, nor kept to the high standards we all sought to attain.

No effort of this magnitude could possibly be achieved without the dedicated involvement of a strong administrative staff. I am deeply indebted to Ms. Erma Howe and her colleagues Ms. Ann Houston, Ms. Ruth Lawson, and Ms. Lucille Whitman, for keeping this entire effort organized and running smoothly.

A word of advice for future program chairmen might be in order. Don't take the job on unless you can get lots of help, secure many more reviewers than you think you'll need (each meeting more papers are submitted), start early, and computerize if possible.

Finally, my thanks go to Ms. Gerrie Katz of the IEEE Computer Society and the conference general chairman, John Roach, whose guidance enabled us to effectively carry out our task.

Charles R. Weisbin

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"Artificial Intelligence: Problems and Issues"