Approximation Theory V

Edited by

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L. L. Schumaker

J. D. Ward

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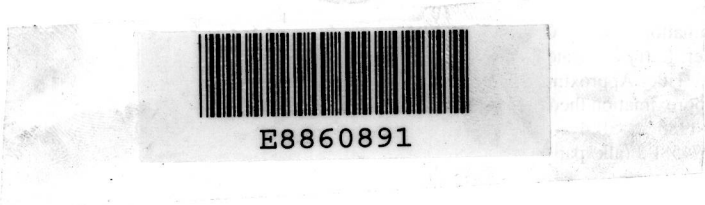

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PREFACE

During the week of January 13–17, 1986, The Fifth International Symposium on Approximation Theory was held at Texas A&M University in College Station, Texas. Earlier meetings were held in 1973, 1976, and 1980 in Austin, and 1983 in College Station. Academic Press published the proceedings of the four previous conferences, and we are pleased that they are continuing the tradition with the present volume.

The conference was attended by more than 150 mathematicians who came from 24 different countries. The program included nine survey lectures, and 125 research talks. The survey talks dealt with several particularly active subareas of approximation theory, including complex approximation, Padé approximation, multivariate splines, signal processing, bases of Banach spaces, Haar systems, and constrained spline interpolation. The papers based on these talks are arranged alphabetically by author at the beginning of this book. We hope that they will provide useful starting points for further research.

This volume also contains 98 short articles based on the research lectures presented at the conference. These are arranged alphabetically by author in the second part of the book, and should provide an up-to-date snapshot of current research in Approximation Theory.

In the proceedings of the 1983 conference, we included a 42 page bibliography on Bernstein polynomials compiled by H. Gonska and J. Meier, and covering the years 1955–1982. In the past 5 years there has been considerable additional activity in this area. With the hope that it will be a useful reference for our readers, as the last item in this book we include a 34 page supplement compiled by the same authors.

We would like to thank the National Science Foundation for providing a grant to fund this symposium. The Department of Mathematics at Texas A&M University provided logistical support, and the College of Science partially supported the conference banquet.

Several of our colleagues, students, and friends helped with various chores during the conference. These included G. Chen, Margaret Chui, Tharwat Fawzy, Karola Feltz, András Kroó, and M.J. Lai. Finally, we want to acknowledge the efforts of Mrs. Jan Want, who not only served as secretary for the conference, but also typed a number of the manuscripts for these proceedings.

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