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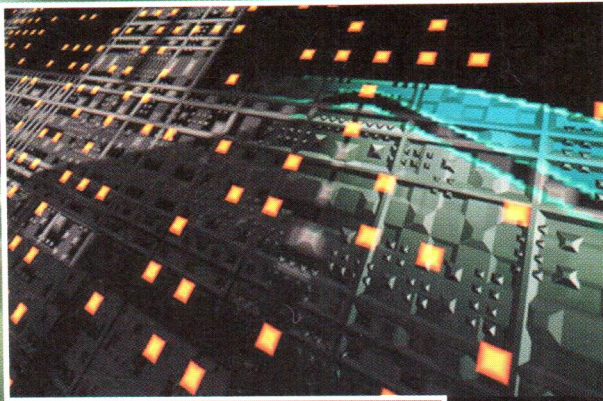
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DIGITAL SIGNAL PROCESSING

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PREFACE

It gives me immense pleasure that I have got an opportunity to write a book on the subject, which is embedded in my soul. This book is the outcome of my eight years research and teaching experience in the area of digital signal processing. I am feeling very proud by writing a text book on digital signal processing with balanced combination of theory and numerical, specially for the students of Punjab (my motherland) and I am the first author of the state who have taken initiative to write a text book on the subject according to requirement of students of the state. I have tried to cover almost all the contents of the course according to the syllabus of Punjab Technical University, Guru Nanak Dev University, National Institutes of Technology, Punjab University, Punjabi University and Thapar University. Book is specially designed according to the syllabus of Punjab Technical University. Laboratory manual using very popular and powerful software namely MATLAB (widely used software by scientists and engineers working in the area of digital signal processing) is included in the appendix, which contains all laboratory experiments for the course as per PTU syllabus.

January 2008

Dr. Davinder Pal Sharma

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I am extremely indebted to my family, father (**Sh. Som Parkash**), mother (**Smt. Ram Dulari**), wife (**Mrs. Pooja**), son (**Master Rashesh Sharma**) and my younger brother (**Mr. Satinder Pal Sharma**) for keeping patience and providing me continues support and inspiration during my work.

At last but not least, I wish to convey my heartfelt thanks to **M/s Kalyani Publishers** for giving me an opportunity to write this book and for providing cooperation.

I dedicate this book to "**Mata Saraswati - the Goddess of Wisdom**", without her blessing this mission could never be accomplished.

Dr. Davinder Pal Sharma
January 2008

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