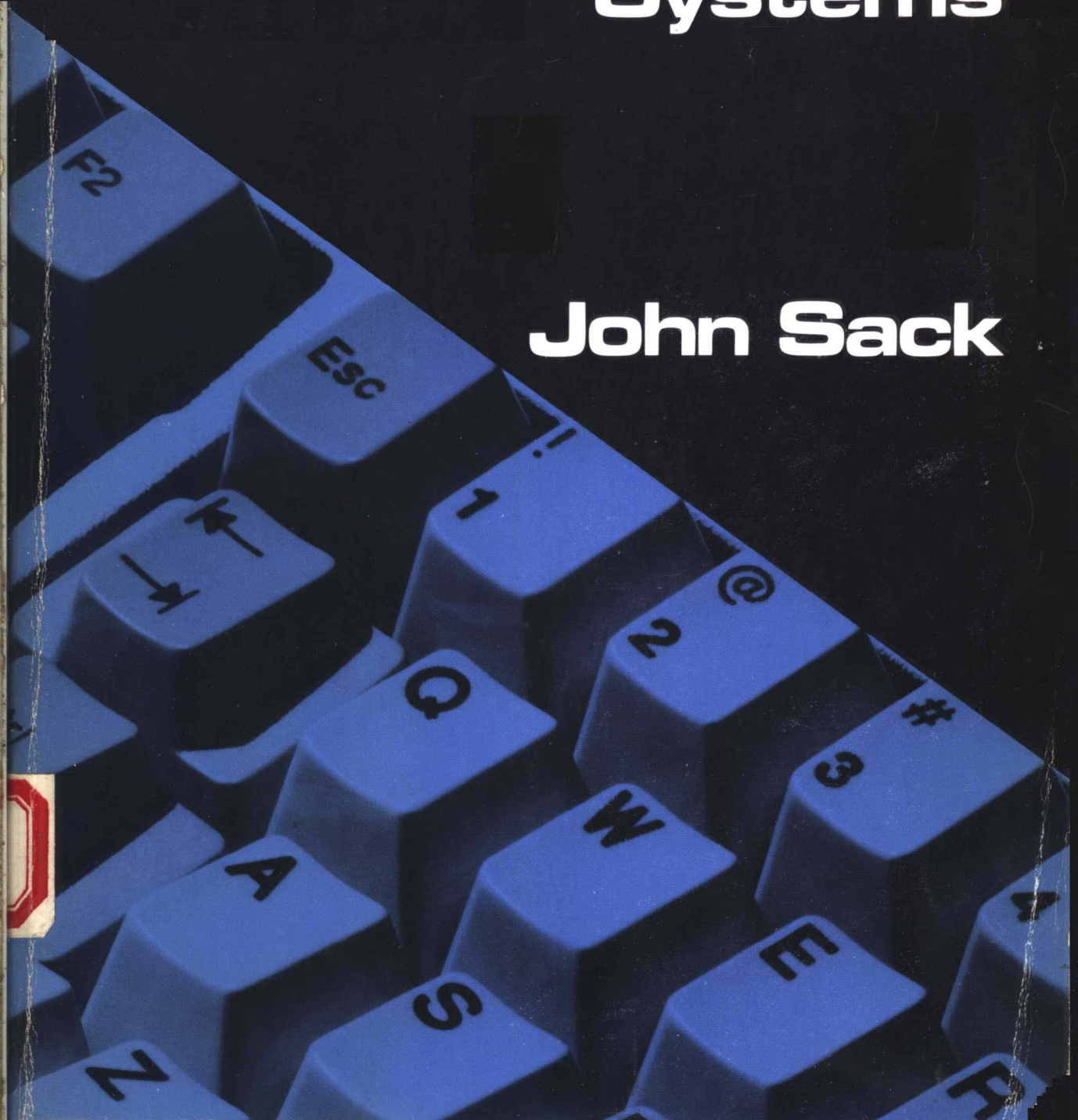


Fundamentals of IBM Computing Systems

John Sack



Fundamentals of IBM COMPUTING SYSTEMS

JOHN SACK



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PREFACE

We live in an age of computers. Whether they are used to figure out utility bills, help plan new bridges, or guide orbiting satellites, our lives are each day affected by the computers around us. We can even go so far as to say that life as we know it today would not be possible without computers.

Computers are among the most useful tools ever invented by man, yet they are widely misunderstood. They have developed quickly into fantastically complex machines that operate at incredible speeds. The "mystique" of the computer has left many people with the feeling that they could never understand these machines. But they are mistaken. Some experts believe the computer will be as commonplace as television and telephones by the year 1990.

All computers on the market, from the smallest hand-held model to the largest and most complex, only perform variations of the "three Rs": readin', 'ritin', and 'rithmetic. What a computer does is that simple and straightforward. *Fundamentals of IBM Computing Systems* will show you how computers *read* data, *write* results, and do *arithmetic* (plus a little logic) to get the same results.

This book will also show you how to use the computer as a tool to solve problems. You will learn how a problem is analyzed and how to program the solution. When you have finished the book, you will be ready to examine in detail procedures and equipment used in computer processing. You will also be able to acquire additional information about any phase of computer programming.

Fundamentals of IBM Computing Systems also places today's computing systems in their historical perspective. You will learn how computers evolved to their present state and share some thoughts on the future of computers and man's relation to them. Hopefully you will conclude, as I do, that the prospects are both positive and exciting.

One final note: although the book is illustrated with examples of IBM computing systems, its content and concepts apply equally to the systems of other manufacturers.

A major goal of *Fundamentals of IBM Computing Systems* is to make you completely familiar and comfortable with computer jargon. To do this, the book explains technical terms in several ways. In Part One they are, for the most part, simply introduced in context (and *italicized*) without elaborate definition. Detailed explanations come later in Parts Two and Three.

The book is also interspersed with questions and exercises. Some of these are designed to help you remember what you have just read; some will point you toward further study on your own; still others simply provide food for thought. Answers to the questions appear at the back of the book.

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