

Software Fault Tolerance, Michael R. Lyu (ed.), Wiley, 1995, ISBN 0-471-95068-8, 425 pages.

The intent of this book is to collect the most recent advances in Software Fault Tolerance. This is a, generally, unknown or misunderstood area of software engineering. SFT is concerned deals with handling errors once they have occurred, as opposed to traditional software engineering areas of software fault avoidance or software fault removal.

This book consists of two major divisions: survey of techniques and models in SFT, and applications and experiments in SFT. In other words, part one is theory and two is applications. N-version programming and recovery-block concepts are covered in both the theory and application sections. Exception handling is covered in the theory section, as well as various modeling schemes. The application chapters, in addition, discuss SFT features in three commercial OS's, a set of software components to detect and recover from software faults, and software fault insertion testing.

This book is appropriate for graduate students and practicing software professionals. This book brings together state of the art research papers on an area of software engineering that is not well known. Most software professionals will find at least a portion (or maybe all) of this book to offer techniques that are a vast improvement to their own software development process. This book was professionally written and prepared.

Reviewed by Ronald B. Finkbine, Ph.D.