



Software Testing: Concepts and Operations (Quantitative Software Engineering Series)

By Ali Mili, Fairouz Tchier



Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier

Explores and identifies the main issues, concepts, principles and evolution of software testing, including software quality engineering and testing concepts, test data generation, test deployment analysis, and software test management

This book examines the principles, concepts, and processes that are fundamental to the software testing function. This book is divided into five broad parts. Part I introduces software testing in the broader context of software engineering and explores the qualities that testing aims to achieve or ascertain, as well as the lifecycle of software testing. Part II covers mathematical foundations of software testing, which include software specification, program correctness and verification, concepts of software dependability, and a software testing taxonomy. Part III discusses test data generation, specifically, functional criteria and structural criteria. Test oracle design, test driver design, and test outcome analysis is covered in Part IV. Finally, Part V surveys managerial aspects of software testing, including software metrics, software testing tools, and software product line testing.

- Presents software testing, not as an isolated technique, but as part of an integrated discipline of software verification and validation
- Proposes program testing and program correctness verification within the same mathematical model, making it possible to deploy the two techniques in concert, by virtue of the law of diminishing returns
- Defines the concept of a software fault, and the related concept of relative correctness, and shows how relative correctness can be used to characterize monotonic fault removal
- Presents the activity of software testing as a goal oriented activity, and explores how the conduct of the test depends on the selected goal
- Covers all phases of the software testing lifecycle, including test data generation, test oracle design, test driver design, and test outcome analysis

Software Testing: Concepts and Operations is a great resource for software

quality and software engineering students because it presents them with fundamentals that help them to prepare for their ever evolving discipline.

 [Download Software Testing: Concepts and Operations \(Quantit ...pdf](#)

 [Read Online Software Testing: Concepts and Operations \(Quant ...pdf](#)

Software Testing: Concepts and Operations (Quantitative Software Engineering Series)

By Ali Mili, Fairouz Tchier

Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier

Explores and identifies the main issues, concepts, principles and evolution of software testing, including software quality engineering and testing concepts, test data generation, test deployment analysis, and software test management

This book examines the principles, concepts, and processes that are fundamental to the software testing function. This book is divided into five broad parts. Part I introduces software testing in the broader context of software engineering and explores the qualities that testing aims to achieve or ascertain, as well as the lifecycle of software testing. Part II covers mathematical foundations of software testing, which include software specification, program correctness and verification, concepts of software dependability, and a software testing taxonomy. Part III discusses test data generation, specifically, functional criteria and structural criteria. Test oracle design, test driver design, and test outcome analysis is covered in Part IV. Finally, Part V surveys managerial aspects of software testing, including software metrics, software testing tools, and software product line testing.

- Presents software testing, not as an isolated technique, but as part of an integrated discipline of software verification and validation
- Proposes program testing and program correctness verification within the same mathematical model, making it possible to deploy the two techniques in concert, by virtue of the law of diminishing returns
- Defines the concept of a software fault, and the related concept of relative correctness, and shows how relative correctness can be used to characterize monotonic fault removal
- Presents the activity of software testing as a goal oriented activity, and explores how the conduct of the test depends on the selected goal
- Covers all phases of the software testing lifecycle, including test data generation, test oracle design, test driver design, and test outcome analysis

Software Testing: Concepts and Operations is a great resource for software quality and software engineering students because it presents them with fundamentals that help them to prepare for their ever evolving discipline.

Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier **Bibliography**

- Sales Rank: #3862378 in Books
- Published on: 2015-06-15
- Original language: English
- Number of items: 1
- Dimensions: 9.50" h x 1.01" w x 6.30" l, .0 pounds

- Binding: Hardcover
- 400 pages

 [**Download Software Testing: Concepts and Operations \(Quantit ...pdf**](#)

 [**Read Online Software Testing: Concepts and Operations \(Quant ...pdf**](#)

Download and Read Free Online Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier

Editorial Review

From the Back Cover

This book explores and identifies the main issues, concepts, principles and evolution of software testing, including software quality engineering and testing concepts, test data generation, test deployment analysis, and software test management

This book examines the principles, concepts, and processes that are fundamental to the software testing function. This book is divided into five broad parts. Part I introduces software testing in the broader context of software engineering and explores the qualities that testing aims to achieve or ascertain, as well as the lifecycle of software testing. Part II covers mathematical foundations of software testing, which include software specification, program correctness and verification, concepts of software dependability, and a software testing taxonomy. Part III discusses test data generation, specifically, functional criteria and structural criteria. Test oracle design, test driver design, and test outcome analysis is covered in Part IV. Finally, Part V surveys managerial aspects of software testing, including software metrics, software testing tools, and software product line testing.

- Presents software testing, not as an isolated technique, but as part of an integrated discipline of software verification and validation
- Proposes program testing and program correctness verification within the same mathematical model, making it possible to deploy the two techniques in concert, by virtue of the law of diminishing returns
- Defines the concept of a software fault, and the related concept of relative correctness, and shows how relative correctness can be used to characterize monotonic fault removal
- Presents the activity of software testing as a goal oriented activity, and explores how the conduct of the test depends on the selected goal
- Covers all phases of the software testing lifecycle, including test data generation, test oracle design, test driver design, and test outcome analysis

Software Testing: Concepts and Operations is a great resource for software quality and software engineering students because it presents them with fundamentals that help them to prepare for their ever evolving discipline.

Fairouz Tchier is an Associate Professor at King Saud University in Saudi Arabia. Her main areas of research are discrete mathematics, theoretical computer science, Software engineering and fuzzy theory.

Ali Mili is a Professor at New Jersey Institute of Technology. His research is focused on software engineering, including technical and organizational aspects, and on software engineering education.

About the Author

Fairouz Tchier is an Associate Professor at King Saud University in Saudi Arabia. Her main areas of research are discrete mathematics, theoretical computer science, Software engineering and fuzzy theory.

Ali Mili is a Professor at New Jersey Institute of Technology. His research is focused on software

engineering, including technical and organizational aspects, and on software engineering education.

Users Review

From reader reviews:

Kelly Cohn:

Have you spare time for any day? What do you do when you have considerably more or little spare time? Yes, you can choose the suitable activity to get spend your time. Any person spent their very own spare time to take a go walking, shopping, or went to the particular Mall. How about open or even read a book allowed Software Testing: Concepts and Operations (Quantitative Software Engineering Series)? Maybe it is to get best activity for you. You recognize beside you can spend your time using your favorite's book, you can better than before. Do you agree with its opinion or you have additional opinion?

Robert Thompson:

A lot of people always spent all their free time to vacation or maybe go to the outside with them family or their friend. Are you aware? Many a lot of people spent they will free time just watching TV, or maybe playing video games all day long. If you would like try to find a new activity that's look different you can read the book. It is really fun for yourself. If you enjoy the book you read you can spent all day long to reading a book. The book Software Testing: Concepts and Operations (Quantitative Software Engineering Series) it is rather good to read. There are a lot of individuals who recommended this book. They were enjoying reading this book. When you did not have enough space to deliver this book you can buy the e-book. You can m0ore easily to read this book out of your smart phone. The price is not to cover but this book offers high quality.

Phyllis Ramirez:

In this period of time globalization it is important to someone to get information. The information will make professionals understand the condition of the world. The condition of the world makes the information better to share. You can find a lot of personal references to get information example: internet, magazine, book, and soon. You can view that now, a lot of publisher that print many kinds of book. The book that recommended for you is Software Testing: Concepts and Operations (Quantitative Software Engineering Series) this guide consist a lot of the information with the condition of this world now. This kind of book was represented how do the world has grown up. The terminology styles that writer require to explain it is easy to understand. Often the writer made some investigation when he makes this book. That's why this book acceptable all of you.

Alicia Cain:

Don't be worry should you be afraid that this book can filled the space in your house, you will get it in e-book method, more simple and reachable. This particular Software Testing: Concepts and Operations (Quantitative Software Engineering Series) can give you a lot of buddies because by you checking out this one book you have thing that they don't and make you more like an interesting person. That book can be one

of one step for you to get success. This reserve offer you information that perhaps your friend doesn't understand, by knowing more than other make you to be great folks. So , why hesitate? We should have Software Testing: Concepts and Operations (Quantitative Software Engineering Series).

Download and Read Online Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier #VPSYTL9BCK

Read Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier for online ebook

Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier books to read online.

Online Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier ebook PDF download

Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier Doc

Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier Mobipocket

Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier EPub

VPSYTLE9BCK: Software Testing: Concepts and Operations (Quantitative Software Engineering Series) By Ali Mili, Fairouz Tchier