Trustworthy Systems Through Quantitative Software Engineering
Lawrence Bernstein, C. M. Yuhas

E-Book 978-0-471-75032-1 October 2005 $133.99
Hardcover 978-0-471-69691-9 October 2005 $166.50
O-Book 978-0-471-75033-8 October 2005 Available on Wiley Online Library

DESCRIPTION

A benchmark text on software development and quantitative software engineering

"We all trust software. All too frequently, this trust is misplaced. Larry Bernstein has created and applied quantitative techniques to develop trustworthy software systems. He and C. M. Yuhas have organized this quantitative experience into a book of great value to make software trustworthy for all of us."

- Barry Boehm

Trustworthy Systems Through Quantitative Software Engineering proposes a novel, reliability-driven software engineering approach, and discusses human factors in software engineering and how these affect team dynamics. This practical approach gives software engineering students and professionals a solid foundation in problem analysis, allowing them to meet customers' changing needs by tailoring their projects to meet specific challenges, and complete projects on schedule and within budget.

Specifically, it helps developers identify customer requirements, develop software designs, manage a software development team, and evaluate software products to customer specifications. Students learn "magic numbers of software engineering," rules of thumb that show how to simplify architecture, design, and implementation.
Case histories and exercises clearly present successful software engineers' experiences and illustrate potential problems, results, and trade-offs. Also featuring an accompanying Web site with additional and related material, Trustworthy Systems Through Quantitative Software Engineering is a hands-on, project-oriented resource for upper-level software and computer science students, engineers, professional developers, managers, and professionals involved in software engineering projects.

An Instructor's Manual presenting detailed solutions to all the problems in the book is available from the Wiley editorial department. An Instructor Support FTP site is also available.

---

**ABOUT THE AUTHOR**

LAWRENCE BERNSTEIN is the Series Editor for the Quantitative Software Engineering Series, published by Wiley. Professor Bernstein is currently Industry Research Professor at the Stevens Institute of Technology. He previously pursued a distinguished executive career at Bell Laboratories. He is a Fellow of IEEE and ACM.

C. M. YUHAS is a freelance writer who has published articles on network management in the IEEE Journal on Selected Areas in Communication and IEEE Network. She has a BA in English from Douglass College and an MA in communications from New York University.

---

**SERIES**

Quantitative Software Engineering Series

To purchase this product, please visit https://www.wiley.com/en-us/9780471750321