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Titolo	Applied OSS Reliability Assessment Modeling, AI and Tools : Mathematics and AI for OSS Reliability Assessment / / by Yoshinobu Tamura, Shigeru Yamada
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Collana	Springer Series in Reliability Engineering, , 2196-999X
Disciplina	006.3
Soggetti	Open source software Artificial intelligence Cooperating objects (Computer systems) Industrial engineering Production engineering Data protection Computers Open Source Artificial Intelligence Cyber-Physical Systems Industrial and Production Engineering Data and Information Security Hardware Performance and Reliability
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Open Source Software Reliability -- Stochastic Differential Equation Model for OSS Reliability Analysis -- Dimensional Stochastic Differential Equation Model for OSS Reliability Analysis -- Jump Diffusion Process Model for OSS Reliability Analysis -- Cyclically Two Dimensional Stochastic Differential Equation Modeling -- Cyclically Two Dimensional Jump Diffusion Process Modeling -- Three Dimensional Tool Based on Noisy Model -- Deep Learning Method Based on fault big data Analysis for OSS Reliability Assessment -- Deep Learning Approach for OSS Reliability Assessment Considering Wiener Process -- Deep Learning

Approach for OSS Reliability Assessment Considering Jump Diffusion Process -- Performance Illustrations of the Developed Application Tool Based on Deep Learning -- Exercise.

Sommario/riassunto

This textbook introduces the theory and application of open source software (OSS) reliability. The measurement and management of open source software are essential to produce and maintain quality and reliable systems while using open source software. This book describes the latest methods for the reliability assessment of open source software. It presents the state of the art of open source software reliability measurement and assessment based on stochastic modeling and deep learning approaches. It introduces several stochastic reliability analyses of OSS computing with application along with actual OSS project data. The book contains exercises to aid learning and is useful for graduate students and researchers.
