1. Record Nr. UNINA9910299316603321 Autore Kumar Sandeep Titolo Software Fault Prediction: A Road Map // by Sandeep Kumar, Santosh Singh Rathore Singapore:,: Springer Singapore:,: Imprint: Springer,, 2018 Pubbl/distr/stampa **ISBN** 981-10-8715-6 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XI, 72 p. 8 illus., 1 illus. in color.) Collana SpringerBriefs in Computer Science, , 2191-5768 Disciplina 005.1 Soggetti Software engineering Application software Software Engineering Information Systems Applications (incl. Internet) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Introduction -- Chapter 2. Software Fault Prediction Process -- Chapter 3. Types of Software Fault Prediction -- Chapter 4. Software Fault Dataset -- Chapter 5. Evaluation of Techniques for Binary Class Prediction -- Chapter 6. Number of Fault Prediction -- Chapter 7. Conclusions. . Sommario/riassunto This book focuses on exploring the use of software fault prediction in building reliable and robust software systems. It is divided into the following chapters: Chapter 1 presents an introduction to the study and also introduces basic concepts of software fault prediction. Chapter 2 explains the generalized architecture of the software fault prediction process and discusses its various components. In turn, Chapter 3 provides detailed information on types of fault prediction models and discusses the latest literature on each model. Chapter 4 describes the software fault datasets and diverse issues concerning fault datasets when building fault prediction models. Chapter 5 presents a study evaluating different techniques on the basis of their performance for software fault prediction. Chapter 6 presents another study evaluating techniques for predicting the number of faults in the software modules.

In closing, Chapter 7 provides a summary of the topics discussed. The book will be of immense benefit to all readers who are interested in

starting research in this area. In addition, it offers experienced researchers a valuable overview of the latest work in this area.