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**Reiner R. Dumke,
Alain Abran (Eds.)**

Current Trends in Software Measurement

Proceedings of the 11th International Workshop
on Software Measurement

August 28-29, 2001, Montréal (Québec) Canada

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Dumke/Abran: Current Trends in Software Measurement

Leserkreis:

Praktiker im IT-Bereich, *Wissenschaftler* in Forschungsbereichen zum Software Engineering, *Studenten* der Informatik und Wirtschaftsinformatik in den höheren Semestern als Ergänzungsliteratur

(The book will be of interest to software engineering researchers, as well as to practitioners in the areas of project management and quality improvement programs, for both software maintenance and software development.)

Zusammenfassung:

Software measurement is one of the key technologies in the control and management of the software development process. Issues such as the applicability of measures and metrics to software, the efficiency of measurement programs in industry and the theoretical foundations of software engineering have been researched in order to evaluate and improve modern software development approaches like component-based development, object-oriented and agent-based systems, and reliable telecommunications systems.

In the tradition of our software measurement research communities, the German Computer Science Interest Group on Software Measurement (GI), the Canadian Interest Group in Software Metrics (CIM) and the Common Software Measurement International Consortium (COSMIC) have all addressed these concerns. Initially, research initiatives were directed towards the definition of new software measurement methods and the validation of the methods themselves. This was followed by further investigation into the various practical applications of software measurement.

This book includes the proceedings of the 11th International Workshop on Software Measurement (IWSM2001) held in Montreal in August, 2001, which constitute a collection of theoretical studies in the field of software measurement and case reports on the application of software metrics in companies and universities in Belgium, Bulgaria, Canada, Germany, Italy, Morocco, Spain and the United States.

In the proceedings, new kinds of measurement for object-oriented and agent-based systems are described, and the COSMIC-FPP functional size method is investigated further. Specific aspects of the software development process (requirements engineering, risk analysis, code inspection and dealing with remaining defects, among others) and improvement of the development process itself are also addressed. We conclude with our own exploration of ways to improve the process and a discussion of possible new approaches.