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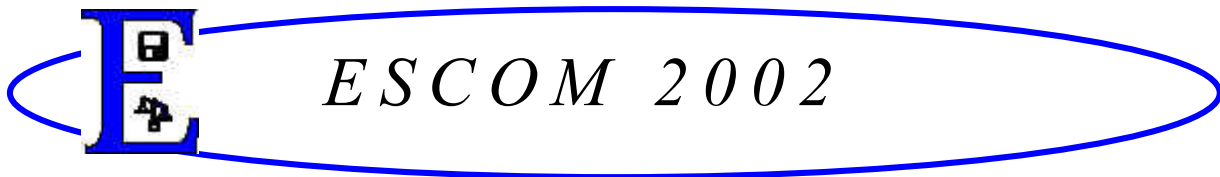
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European Software Control and Metrics Conference

The 13th ESCOM annual conference will be supported by MAIN - the new Metrics Association's International Network, including GUFPI-ISMA (Italian Software Metrics Association)

CALL for PAPERS

DATE:

20th – 22nd March 2002 (workshops 19th March)

VENUE:

Rome, Italy

THEME:

“Sharing Experiences: Adding value to Business”

What can we learn from other disciplines?

What can they learn from us?

ESCOM 2002 will bring practitioners and researchers together to share their experiences of the benefits and applications of cross-pollination between software metrics and other fields such as marketing, engineering and the social sciences.

For new concepts being brought to ‘real life’ dimensions, borrowing from other disciplines could mean the difference between failure and survival.

SUBJECTS:

New Environments
New Software Engineering Processes
Web Metrics
Knowledge Engineering
Experience Reports

Metrics in Contracts
Human Factors in Metrics
Measures of Quality & Usability
Project Management Metrics I
S/IT Value Management

PAPERS:

Please send a 1-page summary of your paper, or workshop proposal, to

Serge Oigny
Programme Chair
serge.oligny@bell.ca

Abstracts due by – **16th November 2001**

PROMOTIONAL OPPORTUNITIES:

Exhibition Space, Tool Vendor's Presentation Slot, Sponsorship Opportunities, Web Links.

CONTACT:

Jo Cowderoy
Conference Manager
Tel/Fax: +44 (0)1444 487516
JoCowderoy@escom.co.uk

You heard it first at ESCOM!

www.escom.co.uk



DASMA Estimation and metric Conference

CONFERENCE LANGUAGE:

German

DATE:

25.-26.10.2001

VENUE:

SIGNAL IDUNA Gruppe in Dortmund/Germany
Workshops (half day and lectures)

Informations about the conference and submission of papers:

Manfred Bundschuh
bunds Schuhm@acm.org

CALL FOR PARTICIPATION - IWSM'01

*for the 11th International Workshop on Software Measurement
of the German Interest Group on Software Metrics and the
Canadian Interest Group on Metrics (C.I.M.)*

In cooperation with

COSMIC – Common Software Measurement International Consortium

August 28-29, 2001 in Montréal (Québec) CANADA

Advanced Program

August 28

8:00	ABRAN, A. DUMKE, R.	Welcome and Introduction
8:30	ABREU, F	Using OCL to Formalize Object-Oriented Metrics Definition
9:30	FETCKE, T.	A generalized Representation for Functional Size Measurement Methods
10:00	BEVO, V. LÉVESQUE, G. and al.	Approche multi-agents pour la mesure de la taille fonctionnelle des logiciels
10:30	DESHARNAIS, J.-M. ABRAN, A.	Application de la méthode de mesure fonctionnelle d'un logiciel: une approche cognitive
11:30	PASTOR, O. ABRAHAO, S.	A FPA-Like Measure for Object Oriented Systems from Conceptual Models
12:00	Lunch Time	
13:30	DANEVA, M.	Evaluating the Maturity Level of the Accelerated SAP Requirements Engineering Process
14:00	RODRIGUEZ, D. SATPATHY, M.	Tool Support for the Typed Generic Process Model
14:30	Break	
15:00	FRENCH, V.	Getting Creative - Measurement without Expensive Tools
15:30	BUGLIONE, L. ABRAN, A.	Creativity in SPI: A Missing Point
16:00	IDRI, A. ABRAN, A.	Software Estimation Models and Soft Computing

16:30	CARBNO, C.	Using Calibrated Capture-Recapture Estimation the Defects Remaining
17:00	Closing	
19:00	Recommended Activity	
<i>August 29</i>		
8:00	ABRAN, A. DUMKE, R.	Welcome and Introduction
8:30	DUMKE, R. WILLIE, C. and al.	Performance Engineering in Agent-Based Systems Concepts Modelling and Examples
9:00	SCHMIETENDORF, A. DUMKE, R.	Empirical Analysis of the Performance-Related Risks
9:30	PATON, K.	Effectiveness of Manual Code Inspection
10:00	Break	
10:30	KECECI, N. ABRAN, A.	A New Graphical Measure for Functional Requirements Quality
11:30	HAMIDI, S. MARTIN, C.	Évaluation de logiciels par réseaux de neurones
12:00	Lunch Time	
13:30	LOTHER, M. DUMKE, R.	Points Metrics - Comparison and Analysis
14:00	TRAN CAO, D. ABRAN, A. and al.	Functional Complexity Measurement
14:30	Break	
15:00	NDIAYE, I. ABRAN, A.	Evaluation of Estimation Models Using ISBSG Repository
15:30	LÉVESQUE, G. BEVO, V. and al.	Development of a Cost Model: A Comparison of Results Based on COSMIC-FFP and SLIM Backfiring Function Points
16:00	DION, F.	Models and Measurement Integration
16:30	Workshop panel	
17:00	Closure	

CALL FOR PARTICIPATION

Workshop der GI-Fachgruppe 2.1.10 "Software-Messung und -Bewertung"

vom 10.9. - 11.9.2001

an der Universität Kaiserslautern

<http://ivs.cs.uni-magdeburg.de/sw-eng/us/giak/>

Some of the presentations are

Ebert (Alcatel, Antwerpen):

eR&D - Effective access to project information in diverse environments

Huerten (Software Costing Cons. GmbH, Blankenheim):

Functionality of Software and how to be described and to be measured?

Lother (Uni Magdeburg):

Efficiency and Maturity of Software Measurement Programs Using Function Point Methods

Poensgen (QuantiMetrics, Wiesbaden):

Konzeption und Anwendungserfahrungen des Performance Enhancement Programme (PEP)

Schmietendorf (Deutsche Telekom, EZ Berlin):

Praktische Erfahrungen im Umgang mit dem "Performance Risiko Modell PRM"

Simon/Breitling (TU Cottbus, Uni Hamburg):

External Validation of a Metrics-based Quality Assessment of the JWAM Framework

Sneed (Software Daten Service, Wien):

Metriken für die Schätzung von Wartungsprojekten

Voelcker (SynSpace, Genf):

Taking SPICE the third Dimension: Adding Risk Analysis to ISO/IEC TR 15504

The final Workshop programme is available in the Web using the URL above.

Prof. D. Rombach
IESE Kaiserslautern

Prof. R. Dumke
University of Magdeburg

CALL FOR DISCUSSION

In the last year the Software Engineering Standard Group *ISO/IEC JTC1/SC7* has created an interesting paper relating to the *software measurement process*.

We will ask you to participate at the discussion to this essential *framework*.

Please look to

http://saturne.info.uqam.ca/Labo_Recherche/Lrg1/sc7/

Information Technology – Software Measurement Process

Introduction

Software measurement supports the management and improvement of software processes and products. Measurement is a primary tool for managing software life cycle activities, assessing the feasibility of project plans, and monitoring the adherence of project activities to those plans. Software measurement is also a key discipline in evaluating the quality of software products and the capability of organisational software processes. It is becoming increasingly important in two party business agreements, where it provides a basis for specification, management, and acceptance criteria.

Continual improvement requires change within the organisation. Evaluation of change requires measurement. Measurement itself does not initiate change. Measurement should lead to action, and not be employed purely to accumulate information. Measurements should have a clearly defined purpose. [ISO 9000: 2000]

This International Standard defines a software measurement process applicable to all software-related engineering and management disciplines. The process is described through a model that defines the activities of the measurement process which are required to adequately specify what measurement information is required, how the measures and analysis results are to be applied, and how to determine if the analysis results are valid. The software measurement process is flexible, tailorable, and adaptable to address the needs of different users.

Informative guidance is provided in seven annexes to this International Standard. This guidance explains how to apply the measurement process.

Dumke, R.; Abran, A. (Eds.):

New Approaches in Software Measurement

10th International Workshop, IWSM 2000, Berlin, Germany, October 4-6, 2000

LNCS 2006, Springer-Verlag, Heidelberg 2001 (244 pages)

ISBN 3-540-41727-3

Software measurement is one of the key technologies to control and to manage the software development process. Research avenues such as the applicability of metrics, the efficiency of measurement programs in industry and the theoretical foundations (of software engineering?) have been investigated to evaluate and improve modern software development areas such as object-orientation, component-based development, multimedia systems design, reliable telecommunication systems etc.

In the tradition of our software measurement research communities, the German Computer Science Interest (GI) Group on Software Measurement and the Canadian Interest Group in Software Metrics (CIM) have attended to these concerns in the recent years. Initially, research initiatives were directed to the definition of new methods of software measurement and the validation of these methods themselves. This was then followed by more and more investigation into practical applications of software measurement and key findings in this area of software engineering have been published in:

- Dumke/Zuse: Theory and Practice of Software Measurement, 1994
- Ebert/Dumke: Software-Metriken in der Praxis, 1996
- Lehner/Dumke/Abran: Software Metrics - Research and Practice in Software Measurement, 1997
- Dumke/Abran: Software Measurement - Current Trends in Research and Practice, 1999

(Would you also like to mention that the proceedings of the Lac Supérieur workshop have been made available on the web at www.lrgl.uqam.ca/?)

This new book includes the Proceedings of the 10th Workshop on Software Measurement held in Berlin in October 2000. It is a collection of theoretical studies in the field of software measurement as well as experience reports on the application of software metrics in Canadian, Belgian, Chinese, Spanish, Italian, English and German companies and universities.

Some of the papers and reports describe new kinds of measurement of object-oriented systems and further improvements to the Function Point method. Others address specific aspects in the software development (requirements engineering, customer satisfaction and agents economy) and the improvement of the software process itself. Finally, the improvement of the software measurement process itself was investigated and new approaches were discussed.

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 in general.

Dumke, R.; Rautenstrauch, C.; Schmietendorf, A.; Scholz, A. (Eds.):

Performance Engineering. State of the Art and Current Trends

LNCS 2047, Springer-Verlag, Heidelberg 2001 (349 pages)

ISBN 3-540-42145-9

The performance analysis of concrete technologies has already been discussed by a multitude of publications and conferences, but the practical application was often neglected. An engineering procedure was comprehensively discussed for the first time on the “International Workshop on Software and Performance: WOSP 1998” in Santa Fe, NM in 1998. Teams were formed, which examined the integration of performance analysis into the software engineering in particular. Practical experiences from industry and new research approaches were discussed in these teams. Diverse national and international activities, e.g., the foundation of a working group within the German Association of Computer Science followed.

This book continues the discussion of performance engineering methodologies. On the one hand, it is based on selected and revised contributions of conferences that were carried out in 2000:

- Second International Workshop on Software and Performance - WOSP 2000, September 17 – 20 in 2000 in Ottawa, Canada,
- First German Workshop on Performance Engineering within the Software Development May 17th in Darmstadt, Germany.

On the other hand, further innovative ideas were considered by a separate call for chapters.

With this book we would like to illustrate the state of the art, current discussions and development trends in the area of performance engineering.

In the first section of the book, the relation of software engineering and performance engineering is discussed. In the second section, the use of models, measures and tools is described. Furthermore, case studies with regard to concrete technologies are discussed in the third section.

The contributions published in this book underline the international importance of this field of research. 20 contributions were considered from Venezuela, Spain, Cyprus, Germany, Canada, USA, Finland, Swedes and Austria.

Dumke, R.; Lehner, F.:

Software-Metriken - Entwicklungen, Werkzeuge und Anwendungsverfahren

DUV Publisher, Wiesbaden, 2000 (229 pages)

ISBN 3-8244-7120-5

This book includes key papers of the Software Metrics Workshop presented in Regensburg in September 1999. Some of these papers

and reports describe new software measurement applications and paradigms for object-oriented measurement, change management and metrics data bases.

Wohlin, Claes et al.:

Experimentation in Software Engineering - An Introduction

Kluwer Academic Publishers Boston/Dordrecht/London, 2000 (204 pages)

ISBN 0-7923-8682-5

The purpose of EXPERIMENTATION IN SOFTWARE ENGINEERING: *An Introduction* is to introduce students, teachers, researchers, and practitioners to experimentation and experimental evaluation with a focus on software engineering. The objective is, in particular, to provide guidelines for performing experiments evaluating methods, techniques and tools in software engineering. The introduction is provided through a process perspective. The focus is on the steps that must be taken to perform experiments and quasi-experiments. The process also includes other types of empirical studies.

The motivation for the book emerged from the need for support the authors experienced when making their software engineering research more experimental. Several books are available that either treat the subject in very general terms or focus on some specific part of experimentation; most focus on the statistical methods in experimentation. These are important, but there are few books elaborating on experimentation from a process perspective; none addressing experimentation in software engineering in particular.

The scope of EXPERIMENTATION IN SOFTWARE ENGINEERING: *An Introduction* is primarily experiments in software engineering as a means for evaluating methods, techniques and tools. The book provides some information regarding empirical studies in general, including both case studies and surveys. The intention is to provide a brief understanding of these strategies and in particular to relate them to experimentation.

EXPERIMENTATION IN SOFTWARE ENGINEERING: *An Introduction* is suitable for use as a textbook or a secondary text for graduate courses, and for researchers and practitioners interested in an empirical approach to software engineering.

Bundschuh, M.; Fabry, A.:

Aufwandschätzung von IT-Projekten

MITP Publisher, Bonn, 2000 (331 pages)

ISBN 3-8266-0534-9

This new book about software effort and costs estimation, includes a description of the current used methods in practice. A detailed presentation considers the Function Point methods and their different approaches. The book includes some case

studies and is directed for a general practical use in the IT area.

Menascé, D.A.; Almeida, V.A.F.:

Scaling for E-Business – Technologies, Model, Performance, and Capacity Planning

Prentice Hall Publ., 2000 (449 pages)
ISBN 0-13-086328-9

This book teaches you how to approach website performance problems in a methodical and quantitative way. It introduces a methodology to analyze the way websites are used (behavior model graphs) and how work flows through them (interaction diagrams). The book shows you how to build these models from web logs or from a system analysis. It then shows you how to use these models to analyze your current system's behavior, and also to predict how much capacity you will need as demand grows and changes.

The book gives a very readable treatment of each step in this process, giving background tutorials on networking, web servers, server-side scripts, and database servers. It also gives quantitative measures of each of these components, telling you how to size servers and networks for each step of the interaction diagram. For example, it shows the relative cost of ordinary HTTP transactions, and then progresses to SSL/TOS secure transactions, and then SET transactions. In each case it explains the technology, then it explains the performance implications, and finally it considers the pros and cons of using hardware accelerators for the cryptographic steps. Each concept is exemplified by a specific example worked out in detail.

The web is unpredictable: it is very hard to guess what will happen next. What new technology will appear next month? What new security hole will pop up? What feature will create explosive growth on your site? This book cannot answer those questions - no book can. But, once you know what you want to do, this book gives you the quantitative tools to estimate the capacity needed to provide the new features and to estimate

what they will cost, and also to estimate the new system's performance and response time.

Professors Menascé and Almeida have developed a pragmatic approach to website performance modeling. This practitioner's handbook abstracts the current research articles and textbooks - giving you clear advice on how to approach performance problems. The result is a very readable and useful tutorial on how to scale up a website from a single server to a site handling millions of transactions per day.

QualWeek 2001

14th Annual International Internet & Software Quality Week 2001

29 May - 1 June 2001, San Francisco, California

see: <http://www.soft.com/QualWeek/QW2001/>

IWSM'2001:

11th International Workshop on Software Measurement

August 28 - 29, 2001, Montreal, Canada

see: <http://lrql.ugam.ca/workshop2001/>

PROFES 2001:

3rd International Conference on Product Focused Software Process Improvement

September 10 - 13, 2001, Kaiserslautern, Germany,

see: <http://www.ele.vtt.fi/profes2001/>

CONQUEST 2001:

Conference on Quality Engineering in Software Technology

September 19 - 21, 2001, Nuremberg, Germany

see: <http://www.asqf.de/>

IFPUG 2001:

IFPUG Annual Conference,

29 September - 5 October, 2001, Las Vegas, USA

see: <http://www.ifpug.org/>

UML 2001:

Fourth International Conference on the Unified Modeling Language

October 1 - 5, 2001, Toronto, Canada

see: <http://www.cs.toronto.edu/uml2001/>

WCRE 2001:

8th Working Conference on Reverse Engineering

October 2 - 5, 2001, Stuttgart, Germany

see: <http://www.reengineer.org/wcre2001/>

UKSMA 2001:

Software Measurement in Practice Conference,

October 15-17, 2001, Luton, England

see: <http://uksma.co.uk>

ICSM'2001:

IEEE International Conference on Software Maintenance

November 6 - 10, 2001, Florence, Italy

see: <http://www.dsi.unifi.it/icsm2001/>

EuroSTAR 2001:

9th European International Conference on Software Testing Analysis & Review,

November 19 - 23, 2001, Stockholm, Sweden

see: <http://www.eurostar.ie/>

see also: **OOIS**, **ECOOP** and **ESEC** European Conferences

Other Information Sources and Related Topics

- <http://rbse.jsc.nasa.gov/virt-lib/soft-eng.html>
Software Engineering Virtual Library in Houston
- <http://www.mccabe.com/>
McCabe & Associates. Commercial site offering products and services for software developers (i. e. Y2K, Testing or Quality Assurance)
- <http://www.sei.cmu.edu/>
Software Engineering Institute of the U. S. Department of Defence at Carnegie Mellon University. Main objective of the Institute is to identify and promote successful software development practices.
Exhaustive list of publications available for download.
- <http://dxsting.cern.ch/sting/sting.html>
Software Technology INterest Group at CERN: their WEB-service is currently limited (due to "various reconfigurations") to a list of links to other information sources.

- <http://www.spr.com/index.htm>
Software Productivity Research, Capers Jones. A commercial site offering products and services mainly for software estimation and planning.
- <http://fdd.gsfc.nasa.gov/seltext.html>
The Software Engineering Laboratory at NASA/Goddard Space Flight Center. Some documents on software product and process improvements and findings from studies are available for download.
- <http://www.qucis.queensu.ca/Software-Engineering/>
This site hosts the World-Wide Web archives for the USENET usegroup comp.software-eng. Some links to other information sources are also provided.
- <http://www.esi.es/>
The European Software Institute, Spain
- http://saturne.info.uqam.ca/Labo_Recherche/lrgl.html
Software Engineering Management Research Laboratory at the University of Quebec, Montreal. Site offers research reports for download. One key focus area is the analysis and extension of the Function Point method.
- <http://www.SoftwareMetrics.com/>
Homepage of Longstreet Consulting. Offers products and services and some general information on Function Point Analysis.
- <http://www.utexas.edu/coe/sqi/>
Software Quality Institute at the University of Texas at Austin. Offers comprehensive general information sources on software quality issues.
- <http://www.trese.cs.utwente.nl/~vdberg/thesis.htm>
Klaas van den Berg: Software Measurement and Functional Programming (PhD thesis)
- <http://divcom.otago.ac.nz:800/com/infosci/smrl/home.htm>
The Software Metrics Research Laboratory at the University of Otago (New Zealand).
- <http://ivs.cs.uni-magdeburg.de/sw-eng/us/>
Homepage of the Software Measurement Laboratory at the University of Magdeburg.
- <http://www.cs.tu-berlin.de/~zuse/>
Homepage of Dr. Horst Zuse
- <http://dec.bournemouth.ac.uk/ESERG/bibliography.html>
Annotated Bibliography on Object-Oriented Metrics

- <http://www.iso.ch/9000e/forum.html>
The ISO 9000 Forum aims to facilitate communication between newcomers to Quality Management and those who, having already made the journey have experience to draw on and advice to share.
- <http://www.qa-inc.com/>
Quality America, Inc's Home Page offers tools and services for quality improvement. Some articles for download are available.
- <http://www.quality.org/qc/>
Exhaustive set of online quality resources, not limited to software quality issues
- <http://freedom.larc.nasa.gov/spqr/spqr.html>
Software Productivity, Quality, and Reliability N-Team
- <http://www.qsm.com/>
Homepage of the Quantitative Software Management (QSM) in the Netherlands
- <http://www.iese.fhg.de/>
Homepage of the Fraunhofer Institute for Experimental Software Engineering (IESE) in Kaiserslautern, Germany
- <http://www.highq.be/quality/besma.htm>
Homepage of the Belgian Software Metrics Association (BeSMA) in Keebergen, Belgium
- http://www.cetus-links.org/oo_metrics.html
Homepage of Manfred Schneider on Objects and Components
- <http://dec.bournemouth.ac.uk/ESERG/bibliography.html>
An annotated bibliography of object-oriented metrics of the Empirical Software Engineering Research Group (ESERG) of the Bournemouth University, UK

News Groups

- news:comp.software-eng
- news:comp.software.testing
- news:comp.software.measurement

Software Measurement Associations

- <http://www.aemes.fi.upm.es>
AEMES Association Espanola de Metricas del Software
- <http://www.asqf.de>
ASQF Arbeitskreis Software-Qualität Franken e.V., Nuremberg, Germany
- <http://www.cosmicon.com>
COSMIC Common Software Measurement International Consortium
- DANMET: Danish Software Metrics Association
- <http://www.dasma.de>
DASMA Deutsche Anwendergruppe für Software Metrik und Aufwands-
schätzung e.V.
- <http://www.esi.es>
ESI European Software Engineering Institute in Bilbao, Spain
- <http://www.fesma.org/>
FESMA Federation of European Software Metrics Associations
- <http://www.sttf.fi>
FiSMA Finnish Software Metrics Association
- FFPUG: French Function Point User Group
- FPUGA: Function Point User Group Austria
- <http://www.iese.fhg.de>
IESE Fraunhofer Einrichtung für Experimentelles Software Engineering
- <http://www.isbsg.org.au>
ISBSG International Software Benchmarking Standards Group, Australia
- <http://www.nesma.nl>
NESMA Netherlands Software Metrics Association
- <http://www.sei.cmu.edu/>
SEI Software Engineering Institute Pittsburgh
- <http://www.spr.com/>
SPR Software Productivity Research by Capers Jones
- <http://fdd.gsfc.nasa.gov/seltext.html>
SEL Software Engineering Laboratory - NASA-Homepage
- <http://www.vrz.net/stev>
STEV Vereinigung für Software-Qualitätsmanagement Österreichs
- <http://www.sqs.de>

SQS Gesellschaft für Software-Qualitätssicherung, Germany

- <http://www.ti.kviv.be>
TI/KVIV Belgisch Genootschap voor Software Metrics
- <http://www.ukσμα.co.uk>
UKSMA United Kingdom Software Metrics Association

Software Metrics Tools (Overviews and Vendors)

Tool Listings

- <http://www.pitt.edu/~ddarcy/isprof/intotool.html#intro>
Metrics Tool Listings by Dace Darcy
- <http://www.cs.umd.edu/users/cml/resources/cmetrics/C/C++MetricsTools>
C/C++ Metrics Tools by Christopher Lott
- <http://davidfrico.com/mettools.htm>
Software Metrics Tools by Dave
- <http://mdmetric.com/meastl1.htm>
Maryland Metrics Tools
- <http://cutter.com/itgroup/reports/function.html>
Function Point Tools by Carol Dekkers

Tool Vendors

- <http://www.mccabe.com>
McCabe & Associates
- <http://www.scitools.com>
Scientific Toolworks, Inc.
- <http://zing.ncsl.nist.gov/webmet/>
Web Metrics
- <http://www.globalintegrity.com/csheets/metself.html>
Global Integrity
- <http://www.spr.com/>
Software Productivity Research (SPR)
- <http://jmetric.it.swin.edu.au/products/jmetric/>
JMetric

- <http://www.imagix.com/products/metrics.html>
Imagix Power Software
- <http://www.verilogusa.com/home.htm>
VERILOG (LOGISCOPE)
- <http://www.qsm.com/>
QSM

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