SSC5906 Engenharia de Software Experimental

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Artigos para leitura e discussão

GRUPO I – Métodos de experimentação

- 1. Norman Fenton, Shari Lawrence Pfleeger and Robert L. Glass, "Science and Substance: A Challenge to Software Engineers", IEEE Software, 11(4):86-95, July 1994.
- 2. Walter F. Tichy, "Hints for Reviewing Empirical Work in Software Engineering", Empirical Software Engineering, 5(4):309-312, December 2000.
- 3. Andreas Zendler, "A Preliminary Software Engineering Theory as Investigated by Published Experiments", Empirical Software Engineering, 6(2):161-180, June 2001.
- 4. Warren Harrison, "Editorial: Open Source and Empirical Software Engineering", Empirical Software Engineering, 6(3):193-194, September 2001.
- 5. Forrest Shull, Manoel G. Mendoncça, Victor Basili, et al. "Knowledge-Sharing Issues in Experimental Software Engineering", Empirical Software Engineering, 9(1-2):111-137, March 2004.
- 6. Per Runeson, and Martin Höst, "Guidelines for conducting and reporting case study research in software engineering", Empirical Software Engineering, 14(2):131-164, April 2009.
- 7. Forrest Shull, Jeffrey Carver, Sira Vegas and Natalia Juristo, "The role of replications in Empirical Software Engineering", Empirical Software Engineering, 13(2):211-218, April 2008.
- 8. Barbara Kitchenham, "The Role of Replications in Empirical Software Engineering—A Word of Warning", Empirical Software Engineering, 13(2):219-221, April 2008.
- 9. Jeff Offutt, "Editorial: Standards for reviewing papers", Journal of Software Testing, Verification and Reliability, 17(3):135-136, September 2007.
- 10. Kitchenham, B. and Pfleeger, Shari. L. Personal Opinion Survey. In: F. Shull et al (2008) Guide do advanced Empirical Software Engineering. Chap. 3. p. 63-92
- 11. Lethbridge, Timothy C., Lyon, Stece and Perry, Peter. The management of University-Industry collaborations involving empirical studies of software engineering. In: F. Shull et al (2008) Guide do advanced Empirical Software Engineering. Chap. 3. p. 257-281

GRUPO II - Métricas e complexidade

- 1. Burak Turhan, Tim Menzies, Ayse B. Bener and Justin Di Stefano, "On the Relative Value of Cross-Company and Within-Company Data for Defect Prediction", 14(5):540-578, October 2009.
- 2. Denys Poshyvanyk, Andrian Marcus, Rudolf Ferenc and Tibor Gyimóthy, "Using Information Retrieval Based Coupling Measures for Impact Analysis", 14(1):5-32, February 2009
- 3. Lionel Briand and J. Wuest, "Empirical Studies of Quality Models in Object-Oriented

- Systems", Advances in Computers, vol. 56, 2002.
- 4. Norman Fenton and Niclas Ohlsson, "Quantitative Analysis of Faults and Failures in a Complex Software System", IEEE Transactions on Software Engineering, 26(8):797-814, August 2000.

GRUPO III - Teste/Validação

- 1. Mark Hennessy and James F. Power, "Analysing the Effectiveness of Rule-Coverage as a Reduction Criterion for Test Suites of Grammar-Based Software", 13(4):343-368, August 2008.
- 2. Yu-Seung Ma, Jeff Offutt and Yong Rae Kwon, "MuJava: An Automated Class Mutation System", Journal of Software Testing, Verification and Reliability, 15(2):97-133, June 2005.
- 3. Mats Grindal, Birgitta Lindstrom, Jeff Offutt and Sten F. Andler, "An Evaluation of Combination Strategies for Test Case Selection", Empirical Software Engineering, 11(4):583-611, December 2006.
- 4. Maldonado, J.C. et al. Perspective-Based Reading: A Replicated Experiment Focused on Individual Reviewer Effectiveness. Empirical Software Engineering, v.11, p.119-142, March, 2006.

GRUPO IV – Segurança (Proteção)

1. Toan Huynh and James Miller, "An Empirical Investigation Into Open Source Web Applications' Implementation Vulnerabilities", 15(5):556-576, October 2010.

GRUPO V - Confiabilidade

1. Carina Andersson, "A Replicated Empirical Study of a Selection Method for Software Reliability Growth Models", Empirical Software Engineering, 12(2):161-182, April 2007.

GRUPO VI - Manutenção e evolução

- 1. Daryl Posnett, Christian Bird and Prem Dévanbu, "An Empirical Study on the Influence of Pattern Roles on Change-Proneness", 16(3):396-423, June 2011.
- 2. Stephen R. Schach, Bo Jin, Liguo Yu, Gillian Z. Heller and Jeff Offutt, "Determining the Distribution of Maintenance Categories: Survey versus Measurement", Kluwer's Empirical Software Engineering, 8(4):351-365, December 2003.

GRUPO VII - Projeto e modelagem

- 1. Anne Martens, Heiko Koziolek, Lutz Prechelt and Ralf Reussner, "From monolithic to component-based performance evaluation of software architectures: A series of experiments analysing accuracy and effort", 16(5):587-622, October 2011.
- 2. John C. Knight and Nancy G. Leveson, "An Experimental Evaluation of the Assumption of Independence in Multiversion Programming", IEEE Transactions on Software Engineering, SE-12(1):96-109, January 1986.

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GRUPO VIII - HCI

- 1. Richard J. Miara, Joyce A. Musselman, Juan A. Navarro and Ben Shneiderman, "Program Indentation and Comprehensibility", Communications of the ACM, 26(11):861-867, November 1983.
- 2. Simone S. Borges et all. Reduced Gui for an interactive geometry software: Does it affect student's performance? Computers in Human Behavior, 2016, pages 124-33.

GRUPO IX - Requisitos

1. Carol K. Gonzales and Gondy Leroy, "Eliciting User Requirements using appreciative Inquiry", 16(6):733-772, December 2011.

GRUPO X – Processos e gerenciamento

- 1. Mats Grindal, Jeff Offutt and Jonas Mellin, "On the Testing Maturity of Software Producing Organizations", Testing: Academia & Industry Conference Practice And Research Techniques, TAIC PART 2006, pages 171-180, August 2006 Windsor, UK.
- 2. M. Pikkarainen, J. Haikara, O. Salo, P. Abrahamsson and J. Still, "The Impact of Agile Practices on Communication in Software Development", 13(3):303-337, June 2008.

GRUPO XII - Outros

- 1. Adam Zajac, Jaroslaw Cholewa, Stanislaw Poprzecki, Zbigniew Waśkiewicz and Jozef Langfort, Effects of sodium bicarbonate ingestion on swim performance in youth athletes, Journal of Sports Science and Medicine (2009) 8, 45-50
- 2. David Budgen et all. Presenting Software engineering results using structured abstracts: a randomized experiment. Empirical Software Engineering, 13,4, 2008, pages 435-68.
- 3. Marco Mello. Que teste estatístico devo usar? Blog.