WMR 2006

First International Workshop on Web Maintenance and Reengineering

24-March-2006, Bari, Italy

co-located with the 10th European Conference on Software Maintenance and Reengineering (CSMR 2006)

Theme and goals

Traditionally, in the software engineering field, a lot of effort is dedicated to design/model, project, and implement software. In fact the importance of designing a robust and well written software system is known and recognized by the industry and the scientific community. However, the "activities" related to general software maintenance (including re-engineering and reverse engineering), and evolution are less addressed. Moreover, the techniques for re-engineering and software maintenance are mostly focused on traditional software rather than Web software (i.e., Web sites, Web applications, or Web services). This workshop/working session aims at evaluating, identifying, and discussing the following example themes:

- Are traditional techniques fully applicable to Web software?
- What are the particular challenges posed by Web software in terms of maintenance, understanding and evolution?
- Which technique is best for XY Web platform? (Where XY represents a Web platform/language/etc of choice)
- Can software measurements be used to increase the quality of Web software maintenance? How it is possible?
- What are the best metrics for Web applications? Do all metrics are meaningful for every Web platform/language/etc?
- What techniques/methods may be useful in order to control Web software changes, versions or migration?
- How reengineering methods can be used to increase the quality of new Web applications?
- Can Web reverse engineering be used to simplify or guide Web software maintenance (including reengineering)?
- Can reverse engineered information (models, source code, etc.) be used to maintenance, evolve and reengineer Web software?

Topics

The goal of the workshop is to identify the most practical and effective (i.e., covering widespread implementation platforms and languages) techniques for web reengineering, evolution and maintenance. We encourage original submissions in any field of Web maintenance and reengineering. Areas of particular interest include (but are not limited to):

- Maintainability analysis and prediction
- Software architecture recovery and evolution
- Machine learning approaches for software maintenance
- Model-driven Web software engineering
- Software restructuring, refactoring and renovation
- Feature identification, extraction and analysis
- Slicing and change analysis
- Reverse engineering techniques
- Techniques, environment and technologies for reengineering
- Evolutionary algorithms or intelligent systems to support reengineering and manintenance
- Effort and cost estimation
- Metrics-based rules for detecting design flaws
- Monitoring the evolution of a system with metrics
- Testing techniques for maintenance and evolution
- Defect rate and reliability prediction
- Aspect-oriented programming on Web software maintenance

Organizers

Andrea Trentini, Alessandro Marchetto and Carlo Bellettini
{andrea.trentini, alessandro.marchetto, carlo.bellettini}@unimi.it
Dipartimento di Informatica e Comunicazione
Università degli Studi di Milano,
via Comelico 39/41, I-20135 Milano,
Italy.

Program committee

· Gustavo Rossi, Universidad Nacional La Plata, Argentina
· Luciano Baresi, Politecnico di Milano, Italy
· Sotiris Christodoulou, University of Patras, Greece
· Mauro Pezzè, Università degli Studi di Milano Bicocca, Italy
· Filippo Ricca, ITC-irst, Centro per la Ricerca Scientifica e Tecnologica, Trento, Italy
· Zakaria Maamar, Zayed University, Dubai, U.A.E.
· Nanjangud C Narendra, IBM India Research Lab, India
· Mario Piattini, Universidad de Castilla-La Mancha, Spain
· Reiko Heckel, University of Leicester, United Kingdom
· Wamberto Vasconcelos, University of Aberdeen, United Kingdom
· Sven Casteleyn, Vrije Universiteit Brussel, Belgium
· Gerald C. Gannod, Arizona State University, USA
· Djamal Benslimane, Claude Bernard University, Lyon, France
· Andrea Tettamanzi, Università degli Studi di Milano, Italy
· Nadira Lammari, CNAM-Laboratoire CEDRIC, France
· Jacky Akoka, CNAM-Laboratoire CEDRIC, France
· Michail Vaitis, University of the Aegean, Greece
· Manolis Tzagarakis, University of Patras, Greece
· Fabio Casati, HP Lab, Palo Alto, CA, USA
· Pieter Van Gorp, University of Antwerp, Belgium
· Sara Comai, Politecnico di Milano, Italy
· Marco Brambilla, Politecnico di Milano, Italy
· Cornelia Boldyreff, University of Lincoln, United Kingdom
· Franca Garzotto, Politecnico di Milano, Italy
· Tarja Systä, Tampere University of Technology, Finland
· Santiago Meliá, Universidad de Alicante, Spain
· Kenneth M.Anderson, University of Colorado, USA