Call for Papers

Second International Workshop on Requirements Engineering Visualization (REV’07)
(http://csis.pace.edu/~ogotel/professional/REV07.html)

To be held in conjunction with The 15th IEEE International Requirements Engineering Conference (RE’07), October 15-19th, 2007, New Delhi, India (http://www.re07.org/).

Themes
With the increasing complexity of software requirements, problems of traditional requirements engineering techniques, including the use of unstructured text and lists, are becoming increasingly apparent. Allowing a large amount of unstructured textual information with redundancy, these approaches typically suffer in understandability, scalability and analysis. Visualization techniques have long been used to overcome these problems in other fields. In the field of education, diagrams are regularly used to aid learning. In various classical engineering disciplines, visualization is used heavily in modeling and simulation. While software engineering has begun to follow in the footsteps of these disciplines with the emergence of model-based development techniques, visualization has largely been at the design level. This workshop aims to explore visualization techniques in the context of requirements engineering.

There are many potential use cases of visualization. Visualization may improve understanding of requirements by showing the overview, providing navigation facilities for incremental exploration, and by conveying a rich set of information through concise and intuitive syntax. Visualization may also allow the same set of information to be viewed in different perspectives by customizing concepts and relationships according to stakeholder interests. This could promote collaborative development, and support the negotiation and prioritization of requirements, leading to a scalable methodology. Visualization may also facilitate analysis of structured requirements, for example, by providing incremental guidance in formal verification. Visualization, as an intuitive practice, may facilitate requirements elicitation and analysis in many other innovative ways.

However, while innovation is admirable, practicality is almost always a necessity. While visualization techniques may be innovative, they have to be practical, like the traditional requirements engineering techniques, in order to be accepted. The fact that the software industry largely uses traditional requirements elicitation and analysis techniques suggests that practicality is a trait hard to achieve. Thus the workshop will also examine the practicality of visualization techniques.

Topics
Topics of interest include experience papers, formal methods, emerging technologies, best practices, research proposals, evaluations and comparisons that focus on visualization techniques for requirements engineering activities. Typical topics of interest include, but are certainly not limited to:

- Visualization languages/techniques for requirements elicitation/analysis/ specification
- Visualization languages/techniques for formal verification/validation of requirements
- Visualization languages/techniques to facilitate the management/evolution of requirements
- Visualization support for existing requirements engineering techniques
- Heuristics and metrics for visualization techniques

Goals
The workshop aims to provide a collaborative session in which ideas related to the visualization of requirements and ways of making them practical are shared, reviewed and debated. The controversy surrounding the practicality of non-traditional requirements engineering techniques will be discussed. The workshop will be used to identify future work, issues, problems and priorities, and to propose recommendations around these dimensions for requirements engineering visualization research.

Targeted Attendees
- RE researchers working in the development of RE tools, techniques and methods
- RE researchers and practitioners investigating the deployment of products of RE research in industry
- RE practitioners with experience in the selection of RE tools, techniques and methods for specific projects

Workshop Format and Duration
The format of REV’07 will provide attendees with an opportunity to become familiar with a new topic and establish a good foundation for discussions about visualization in requirements engineering. We intend to make the workshop...
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discussion and interaction oriented. Paper presentations will be used to provoke dialogue and participants will break out into small groups for more detailed discussion. These small groups will be organized around common themes or goals identified either from the papers, or by the participants during the workshop. At the end of the day, there will be a plenary session where the groups report back to the workshop as a whole on the results of their discussion and future work. Results may be used as a basis for continued publications. Duration: 1 day (6 hours).

Submission Types

**Position papers (3-5 pages):** Short papers state the position of the author(s) on any of the topics within the scope of the workshop. For example, position papers could describe initial experience with a particular visualization technique, propose an area of requirements engineering that could benefit from more innovative forms of visualization or illustrate how visualization techniques from other domains may be applicable to requirements engineering problems. Position papers will be evaluated based on their potential for generating discussion, and on the originality of the positions expressed.

**Full papers (8-10 pages):** Full papers describe and report on the evaluation of visualization techniques in support of requirements engineering activities. For example, a full paper could describe how a comparative evaluation of visualization techniques was performed in practice, either by controlled experimentation in the lab or in an industrial setting; or it may present the results of the actual performance of tools, methods or processes that embed visualization components, in lab-based experiments or field trials. Survey papers that review and critique the range of and/or use of visualization techniques applicable to requirements engineering are also invited. Full papers will be evaluated based on the originality and significance of the contribution, soundness of the validation process or quality of the survey procedure, and on the broader applicability of the results.

**Wider potential for dissemination:** RE’07 is unusual in that it is soliciting interactive posters that are augmented with examples of the use of rich media in requirements engineering, including requirements visualizations, multimedia requirements documents, scenarios, storyboards and vision/concept materials. The authors of all papers accepted to this visualization workshop will be encouraged to prepare a mini-poster to present any tangible requirements engineering visualizations resulting from their work to the wider community of the main conference.

Important Dates

- August 6, 2007: Deadline for workshop submission
- September 7, 2007: Notification to authors
- September 24, 2007: Camera-ready papers due

All deadlines are 23:59 Apia, Samoa time. Please send a PDF submission conforming to IEEE CS proceedings format to Olly Gotel (ogotel@pace.edu).

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