3rd International Workshop on Visualization in Requirements Engineering REV’08

Program Chairs
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Program Committee

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Holger Giese, Hasso Plattner Institute
Seok-Won Lee, University of North Carolina at Charlotte, USA
Frank Marchese, Pace University, New York, USA
Stephen Morris, City University, London, UK
Harold Ossher, IBM Corporation, USA
Raghvinder Sangwan, Pennsylvania State University, USA
Peter Sawyer, Lancaster University, UK
Eric Yu, University of Toronto, Canada
Why a workshop on Visualization (1)?

It has been found empirically that text specifications are inherently ambiguous. The ambiguity is exacerbated with global software development, different languages and cultures.

Graphical models are inherently unambiguous

“Mix the sugar and eggs. Sift the flour. The ingredients must be at room temperature”

Mix what? – the sugar, the eggs the flour or some combo? Unambiguous!

Mix sugar and eggs Sift Flour Ingredients must be at room temperature
Why a workshop on Visualization (2)?

- It is extraordinarily difficult to get stakeholders across multiple time zones to effectively review complex requirement specifications.

- Graphical models can be reviewed by all stakeholders together with minimal language or cultural issues.

This vs.
Why a workshop on Visualization (3)?

- Hierarchical Storage Mechanisms for requirements breakdown with cross-cutting requirements and scale.
- Graphical models size nicely and manage crosscutting requirements without difficulty
Why a workshop on Visualization (4)?

Different teams work on different requirement sets. With a conventional approach, they may not see each others work, or the traces may be absent, or may break across different media.
Why a workshop on visualization (5)?

Natural Language techniques just do not SCALE!

This afternoon, review our documentation and let me know what the impact of this new feature will be.
Conclusions

The workshop chairs believe that:

- Natural language techniques alone are not sufficient and viable
- Visualization techniques work, and work better than traditional text approaches:
  - Scalability
  - Overcoming global boundaries
  - Improved Communication
  - Support for cross-cutting
  - Inherently Unambiguous
Workshop 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.
Issues that speakers should address

- What is the problem you are working on?
- How and why is visualization expected to help?
- Who and what is the visualization for? How are they expected to use it?
- What visualization(s) have you created?
- How was it (they) derived and constructed?
- How does it (they) work?
- Show and tell – explain your poster...
- Has your visualization(s) been used in practice? If so, with what results? If not, what are your plans for validating your work?
- Critique your visualization(s) (i.e., pros, cons, strengths and weaknesses).
- Next steps? Open questions? Include any suggestions as to how things could be done differently/better. Perhaps compare with the state of the art or state of the practice.
Morning Program

09:00 – 09:30 Welcome to REV’08 and Program Overview – Brian Berenbach & Olly Gotel

09:30 – 10:30 Session 1 Visualization Languages and Notations

• Kurt Schneider, Kai Stapel and Eric Knauss -- Beyond Documents: Visualizing Informal Communication (Full Paper – 30 mins)
• Kamaljit Kaur Bimrah, Haralambos Mouratidis and David Preston – Modelling Trust Requirements by Means of a Visualization Language (Short Paper – 20 mins)
• Facilitated Discussion on Presenters’ Visualization Posters (15 minutes)

10:30 – 11:00 Coffee/Tea Break

11:00 – 12:30 Session 2: Visualizing Relationships and Traces in Requirements Engineering

• Philipp Heim, Steffen Lohmann, Kim Lauenroth and Jürgen Ziegler -- Graph-based Visualization of Requirements Relationships (Short Paper – 20 mins)
• Stefan Winkler – On Usability in Requirements Trace Visualizations (Short Paper – 20 mins)
• Daniel Lübke, Kurt Schneider and Matthias Weidlich -- Visualizing Use Case Sets as BPMN Processes (Short Paper – 20 mins)
• Facilitated Discussion on Presenters’ Visualization Posters (15 mins)

• Introduction to Session 4 and Formation of Working Groups – so you can start thinking over lunch. This will involve a look at visualizations from REV’06 and REV’07 (15 mins)

12:30 – 14:00 Lunch
Afternoon Program

14:00 – 15:30  Session 3: Visualizing the Impact of Requirements Decisions in Product Line Environments

- Krzysztof Wnuk, Bjorn Regnell and Lena Karlsson – Visualization of Feature Survival in Platform-Based Embedded Systems Development for Improved Understanding of Scope Dynamics (Full Paper – 30 mins)
- Clotilde Rohleder – Visualizing the Impact of Non-Functional Requirements on Variants - A Case Study (Full Paper – 30 mins)
- Ian Alexander – Visualizing Rationale (Guest Presentation – 15 mins)
- Facilitated Discussion on Presenters’ Visualization Posters (15 mins)

15:30 – 16:00  Coffee/Tea Break

16:00 – 17:30  Session 4: Working Session

- 2 groups / 2 tasks: To Brainstorm the Scope of Visualization Use in Requirements Engineering and Create a Taxonomy of Visualization Techniques - Current Status; Benefits Anticipated and Achieved; Challenges; Proposed Areas for Future Research (Facilitated Working Groups – 1 hour)
- Working Groups Report Back (20 mins)
- REV’08 Wrap-up – Brian Berenbach and Olly Gotel (10 mins)
And Now...

On with the workshop!