

3rd International Workshop on Requirements Engineering and Testing



14th March, 2016. Gothenburg, Sweden.

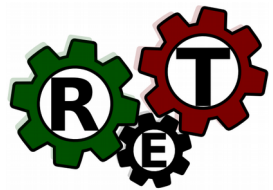


Aim

Meeting point for

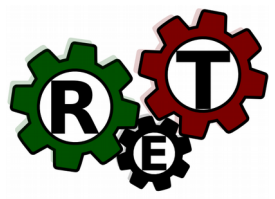
- Requirements Engineering and Testing fields
- Researchers and Practitioners
- Ideas, challenges, practices, experiences and results

Long term goal: **Develop and evolve a RET body of knowledge and community**



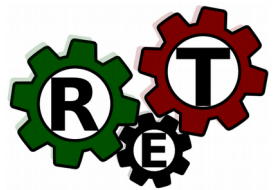
Today's program

09:00	Welcome! Who's who
09:15	Keynote: Tests as requirements - Why we don't do requirements at Axis
10:00	Panel: Overview of RET14 → RET15 → RET16 - Future industry needs
10:30	Coffee break
11:00	Session A: Quality requirements
12:30	Lunch
14:00	Session B: Bridging gaps
15:00	Workshop closing (option to go to RESACS or Postbaren)



Who's who?

- Name
- Affiliation
- Main research interest (1 sentence!)
- Why visit RET?
- Favorite “other” activity



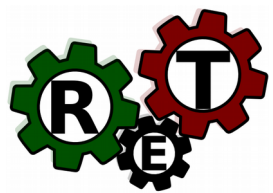
What is RET?

Or what we think it is...
Is it important to define it?

RET covers activities which adjust or arrange the efforts involved in *Requirements Engineering* and/or in *Testing* in such a way as to support the *coordination between these efforts*.

RET can either address both *RE* and *Testing*, or one of these two areas with an *effect* on the other.

RET addresses the activities of *RE* and *Testing*, rather than merely considering their input/output.



RET Topic Areas

1 Processes and practices

- 1.1 Processes and practices
- 1.2 RET at different lifecycle phases
- 1.3 Organizational aspects, including education
- 1.4 Collaboration and communication
- 1.5 Specific contexts, e.g. distrib, OSS, continuous deployment, safety-critical

2 Requirements-based testing

- 2.1 Reqts-based testing processes & techniques
- 2.2 Model-based testing
- 2.3 TDD and BDD

4 Maintaining RET alignment

- 4.1 Managing change/evolution
- 4.2 Traceability (requirements – test cases) incl regression testing
- 4.3 RET metrics

7 Tools & Techniques

- 7.1 Automation techniques
- 7.2 Tools for monitoring and managing RET alignment

3 Quality of Requirements

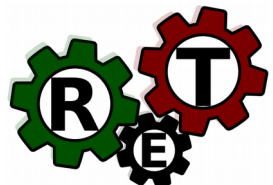
- 3.1 Reqts quality impact on test quality, reqts testability
- 3.2 Reqts validation through testing

5 RET trace offs

- 5.1 Scalability including big data
- 5.2 “Good enough” RET, effort vs ROI

6 Quality requirements

- 6.1 RET alignment for QR/NFR



Elizabeth Bjarnason, Markus Borg, Mirko Morandini, Michael Unterkalmsteiner, Michael Felderer, and Matthew Staats. 2015. Summary of 2nd International Workshop on Requirements Engineering and Testing (RET 2015): Co-located with ICSE 2015. SIGSOFT Softw. Eng. Notes 40, 5 (September 2015), 39-42.

Thank you!

Have an enjoyable and informative day!

Michael Unterkalmsteiner

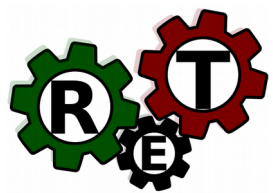
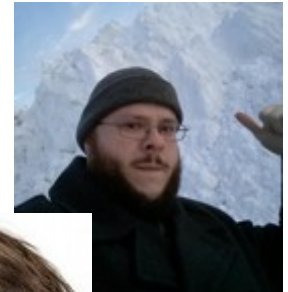
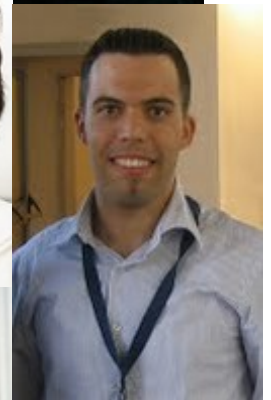
Gregory Gay

Michael Felderer

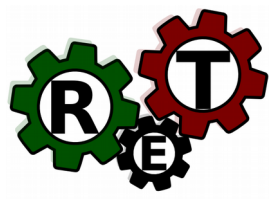
Elizabeth Bjarnason

Markus Borg

Mirko Morandini



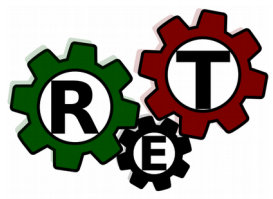
Keynote...



Overview of RET14 → 15 → 16

Future industry needs

- What were the main topics in previous years?
- What should be the next topic(s)?
- What are current challenges in industry?
- Potential collaborations?

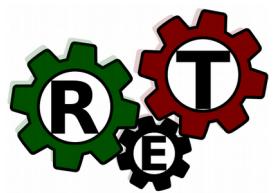


Live Serendip Topic Exploration...



Alexander, E., Kohlmann, J., Valenza, R., Witmore, M., Gleicher, M. (2014, October). **Serendip: Topic model-driven visual exploration of text corpora**. In Conference on Visual Analytics Science and Technology (VAST), (pp. 173-182). IEEE.

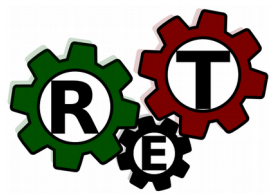
Disclaimer: This exercise is to inspire discussion, not to present the absolute “truth”. Data analysis problematic since data size is small. If you don’t agree with our interpretation it’s probably because you are one of the papers’ authors :-)



Possible interpretation

- 3 years with distinct foci:
 - RET14: Tools, Security Requirements, System Testing, Experience, Development and Models
 - RET15: Test design, Testers, Quality
 - RET16: Language, Quality, Artifacts and Data
- Overall RET is balanced between RE and Testing topics → what we wanted to achieve :-)

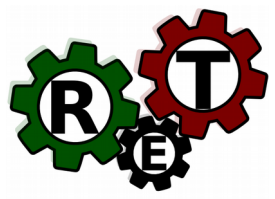
What should be the next topics?
What are our goals in industry?



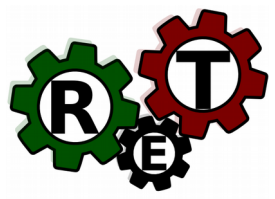
Thank you!

Have an enjoyable and informative day!

Michael Unterkalmsteiner, Gregory Gay
Michael Felderer, Elizabeth Bjarnason
Markus Borg, Mirko Morandini



Sessions...



Thank you!

- Feedback on the Workshop: mun@bth.se
- RET 2017: we target the 25th Requirements Engineering Conference in Portugal (August/September 2017)
- RESACS or Postbaren (at Hotel Clarion, close to the central station)

Thanks also to my colleagues organizing RET16:

Gregory Gay, Michael Felderer, Elizabeth Bjarnason, Markus Borg, Mirko Morandini

