

Current Speaker:
OLIVER

Workshops at RE'13: The Results

Presentation Session of New Ideas for
Researchers and Practitioners Who Weren't There

Oliver Creighton, Marcos Borges

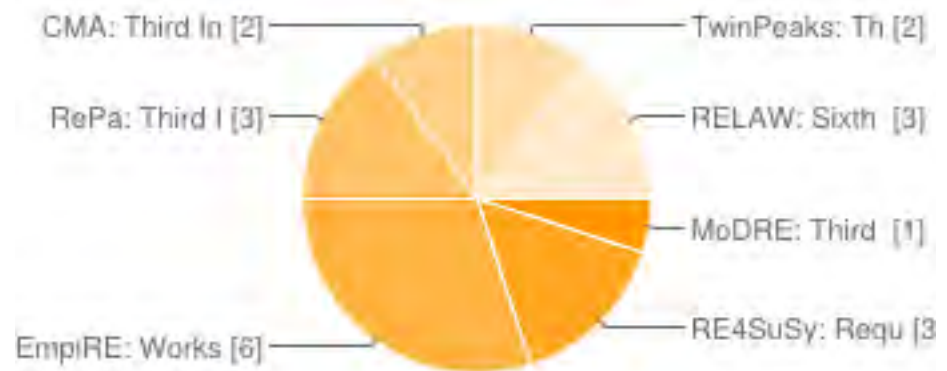
Next Speaker (in 7):
GUNTER

Current Speaker:
OLIVER

Registrations:

MoDRE:	20
RE4SuSy:	12
EmpiRE:	14
RePa:	17
CMA:	13
TwinPeaks:	15
RELAW:	9

Feedback:



Next Speaker (in 6):
GUNTER

Current Speaker: **OLIVER**

OLIVER

KEEP



Next Speaker (in 5):

GUNTER

Current Speaker:
OLIVER

OLIVER

CHANGE



Next Speaker (in 4):

GUNTER

Current Speaker: **OLIVER**

IDEAS

Social sustainability

To provide enough details about how we conduct empirical research so others can replicate the process

Establishing a meta-model for facilitating the assessment of modeling approaches

Regulatory intelligence

Side effects as a topic in empirical research

Benchmark for RELAW related work

The great unified RE theory

Recommender systems for requirements patterns

Learning from other fields

Next Speaker (in 3): **GUNTER**

Current Speaker: **OLIVER**

QUOTES

"We still need more insights from real projects"

It's all a cost model.

Nothing comes to mind.

"What you call goals are not goals, those are norms!"

Systematic Review is not "research", it is only the first step in doing research.

"We are still discussing the same aspects/topics"

Nothing stands out.

State Charts and other UML diagrams are located in the solution space and cannot be used to describe the problem space.

Architecturally irrelevant Requirements

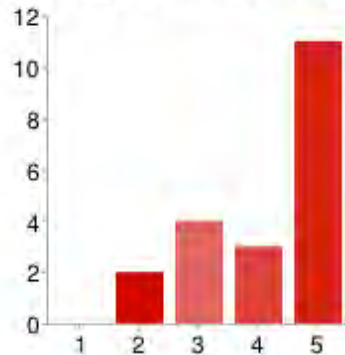
We should assign costs to everything, so that sustainability becomes a matter of cost analysis.

Next Speaker (in 2): **GUNTER**

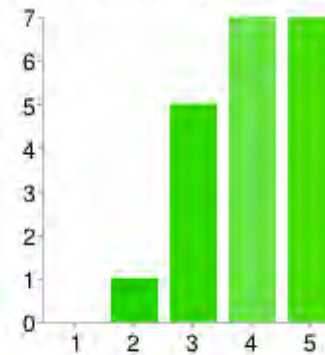
Current Speaker: **OLIVER**

EVALUATION

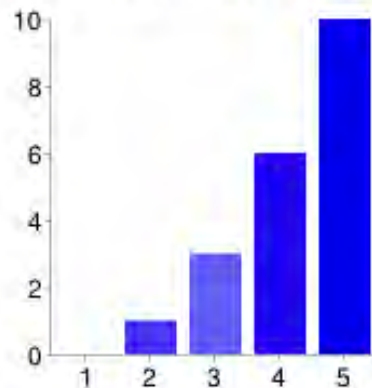
I will try to attend future installments of this workshop



The workshop met my expectations



How well-balanced were presentations, discussions, and interactions?



Are you more of a...?

researcher [ALL]

researcher [20]

practitioner [0]
Other [0]

practitioner [NONE]

Next Speaker (in 1):
GUNTER

Current Speaker:
GUNTER

Next Speaker (in 7):
BIRGIT



Model-Driven Requirements Engineering

Ana Moreira, Gunter Mussbacher, João Araújo,
Nelly Bencomo, Pablo Sánchez



- Goal of Workshop
 - Forum to discuss the challenges of Model-Driven Development for RE
 - RE may benefit from MDD techniques
 - Reuse of requirements
 - requirements@runtime
 - Model Transformation
- Identify new challenges, discuss on-going work and potential solutions, analyze the strengths and weaknesses of MDD approaches for RE





- Third edition
- All editions held at the last three RE
- Typical paper submissions
- Nine papers accepted





- 23 participants
 - Europe: 13
 - South America: 7
 - India: 1
 - Japan: 1
 - North America: 1
- Paper presentations in the morning
- Discussion sessions in the afternoon (5 groups)





Background

transformation	prescriptive models
descriptive models	refinement
problem space	solution space
formalization	system boundaries
different purposes	(understanding, communication, analysis...)
tool support	terminology

Next Speaker (in 3):
BIRGIT



Future Steps

- modeling people & environment
 - modeling phenomena in environment
 - modeling politicians
- quality of modeling languages
 - usability and utility of models in industry
- modeling requirements in an evolving environment

Next Speaker (in 2):
BIRGIT



Future Steps

- quantification
- glossary and roadmap
- tooling (transfer to industry)
- automation is not everything
- domain specific languages

Next Speaker (in 1):
BIRGIT

Current Speaker:
BIRGIT

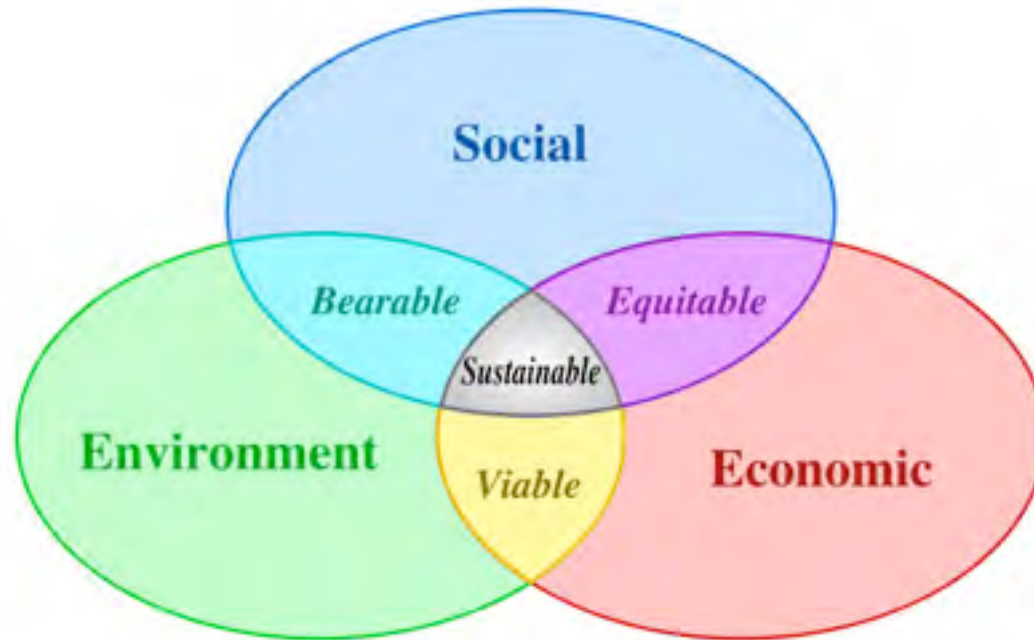
Next Speaker (in 5):
SABRINA

Current Speaker:
BIRGIT

RE4SuSy: Requirements for Sustainable Systems

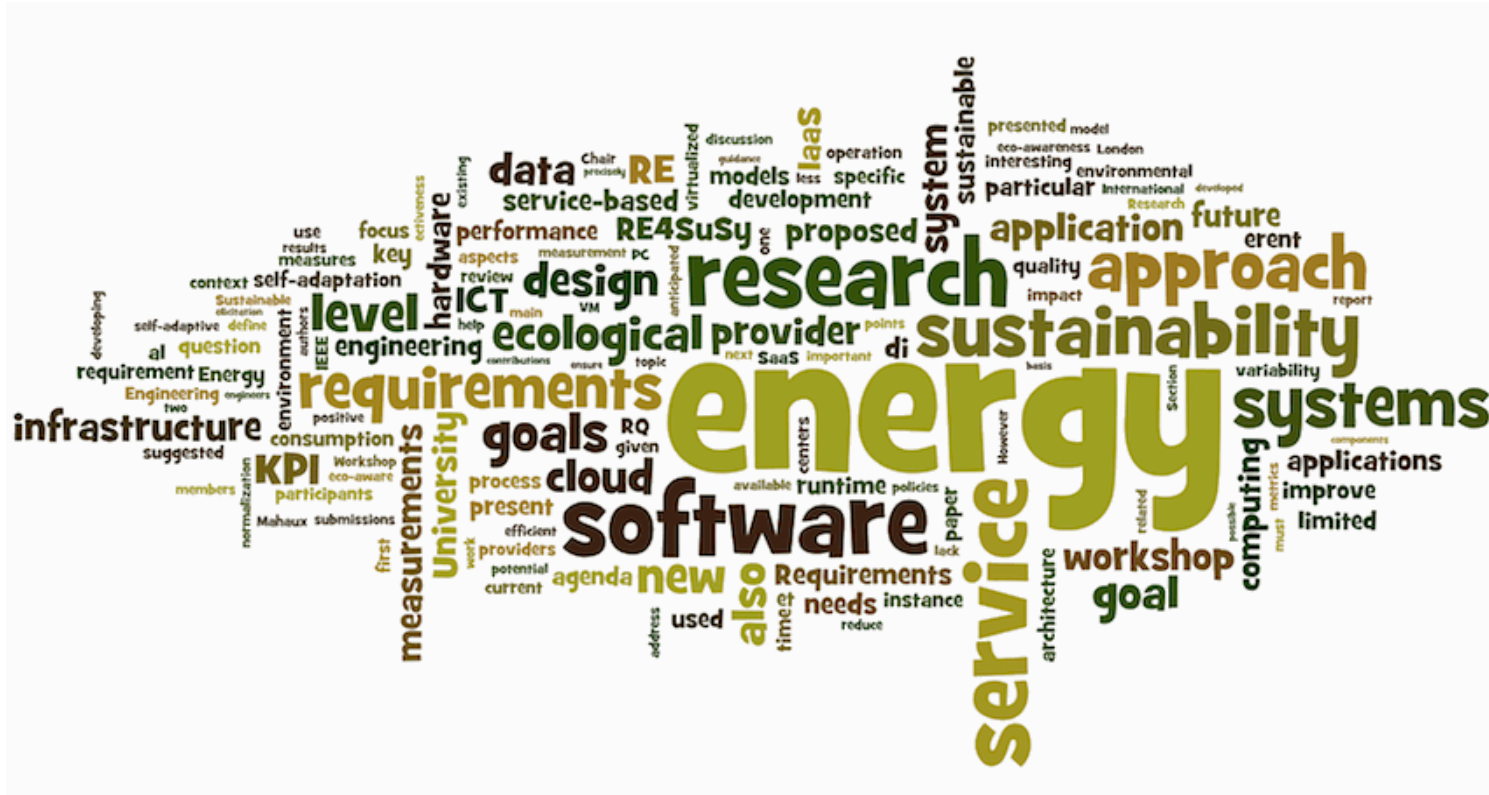


We are designing the world in which
Susy (and her friends) will live...



We have to REQUIRE that this world
will be a great place to live.

A lot of challenges are ahead



Next Speaker (in 3):
SABRINA

7 contributions and... Lots of discussion!



Next Speaker (in 2):
SABRINA

Updated Research Agenda...

Future Steps: We need you !

We are here

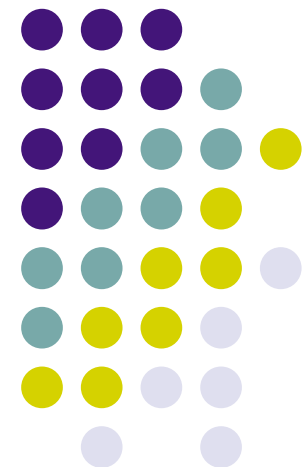


Current Speaker:
SABRINA

Next Speaker (in 6):
LIPING ZHAO

Summary of the Third Workshop on Empirical RE - EmpiRE'2013

**Sabrina Marczak, Tayana Conte, Oscar Pastor,
Maya Daneva**



Workshop Background

- Empirical SE provides ways to gain evidence on what works and what does not in the sub-fields of SE.
- This helps understand the needs for creating or improving technology
- It also advances our knowledge of how to do research that brings value to businesses

Workshop Goal

To increase the cross-fertilization of Empirical SE methods and RE



Workshop Long Term Vision

- ✓ To have practitioners and researchers informed about **strengths, weaknesses** and **side effects** when using a RE technique or technology in specific contexts.

Drug Facts

Therapeutic substance in drug → **Active ingredient (in each tablet)** Chlorpheniramine maleate 2 mg

Product type → **Purpose** Antihistamine

Symptoms or diseases the drug treats → **Uses** temporarily relieves these symptoms due to hay fever or other upper respiratory allergies:
 ■ sneezing ■ runny nose ■ itchy, watery eyes
 ■ itchy throat

When not to use this drug, when to stop taking it, when to see a doctor, and possible side effects → **Warnings**
 Ask a doctor before use if you have
 ■ glaucoma
 ■ a breathing problem such as emphysema or chronic bronchitis
 ■ trouble urinating due to an enlarged prostate gland
 Ask a doctor or pharmacist before use if you are taking tranquilizers or sedatives
 When using this product
 ■ You may get drowsy ■ Avoid alcoholic drinks
 ■ Alcohol, sedatives, and tranquilizers may increase drowsiness
 ■ Be careful when driving a motor vehicle or operating machinery
 ■ Excitability may occur, especially in children
 If pregnant or breastfeeding, ask a health professional before use.
 Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

More information on how to store the drug → **Directions**

Adults and children 12 years and over	Take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours
Children 6 years to under 12 years	Take 1 tablet every 4 to 6 hours; not more than 6 tablets in 24 hours
Children under 6 years	Ask a doctor

Other information Store at 20-25° C (68-77° F)
 ■ Protect from excessive moisture

Other things in the drug, such as colors or flavorings → **Inactive ingredients** D&C yellow no. 10, lactose, magnesium stearate, microcrystalline cellulose, pregelatinized starch

Read carefully: how much to take, how often to take it, and when to stop taking it

Workshop Results

- Rich stories of two kinds:
 - Evaluation of RE technology
 - Execution of industry-relevant research
- List of issues for the future



Next Speaker (in 2):
LIPING ZHAO

Workshop Future

- Get more stories covering new domains: social media, crowd-sourcing, open source, smart cities, health care
- Replications
- Join the conversation!



Next Speaker (in 1):
LIPING ZHAO

Current Speaker:
LIPING ZHAO

Next Speaker (in 8):
ANA

W4: RePa'13

Workshop Results

Workshop Organizers:

Liping Zhao, Barbara Paech, James Naish,
Sam Supakkul, Lin Liu, Lawrence Chung

Background

- RePa workshop series was motivated by the desire to provide **an open forum for researchers and practitioners** to exchange ideas and experience, regarding pattern-based approaches to **capturing, organizing, and reusing of all aspects of requirements engineering-related knowledge**, from both process and product perspectives.
- So as to NOT to reinvent the wheel!
- RePa'13 is the 3rd workshop.

Aim and Objectives

- The overall aim is to **promote** and **support** the **development** and **sharing** of patterns, tools, methods, and repositories to facilitate pattern-based reuse at the requirements level
- To this end, RePa has the following objectives:
 1. **To solicit patterns** that capture knowledge and best practices of RE processes and products
 2. To enable the **development of tools and processes** to support pattern-based reuse
 3. **To share case studies and examples** that promote and validate requirements patterns

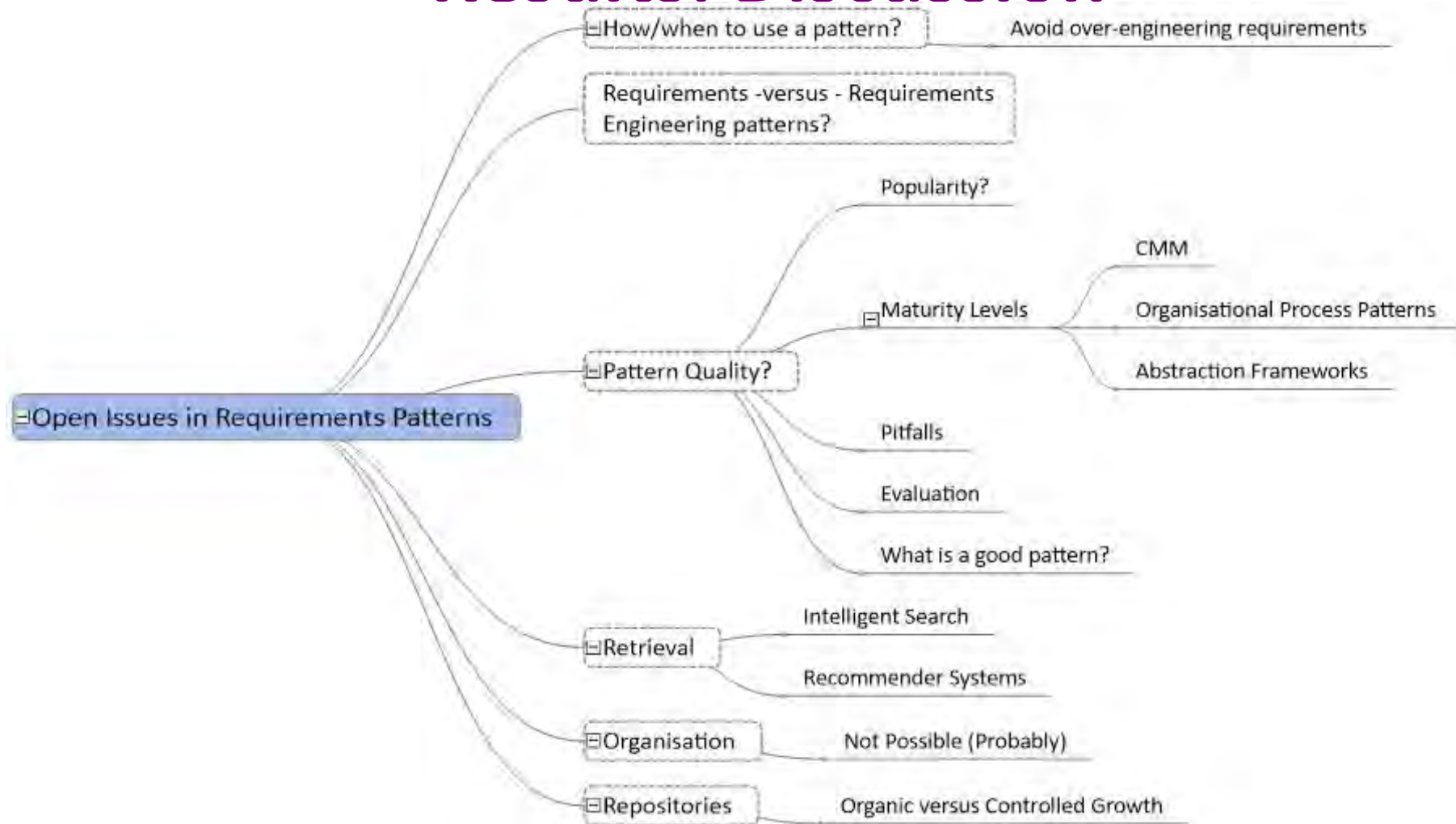
RePa'13 workshop agenda

- 0900 Welcome & Introduction
- 0930 Keynote Address
- 1030 Break
- 1100 Paper Session 1
- 1230 Lunch
- 1430 Fun with Symmetry
- 1500 Paper Session 2
- 1600 Break
- 1630 Paper Session 3 (REPOS)
- 1700 Panel Discussion
- 1800 Close

Results: Paper Sessions

- **Seven papers accepted:** 4 papers on individual patterns; 2 papers on pattern languages; 1 technical paper on variability requirements for product line
- **Topics covered:** Natural language requirements analysis; Transparency; Sustainability; Structuring behavioural requirements; Information design
- **Observations:**
 - There are more pattern language papers this year than previous years
 - Papers address a wide range of topics
 - A shift from “traditional” requirements patterns to “emerging” requirements patterns.

Results: Discussion



Next Speaker (in 3):

ANA

Next Steps

- Collaboration on pattern recommender/retrieval tools
- Developing standards for describing and sharing patterns:
 - Standard description templates
 - Standard interchange formats such as XML
 - API Standards for Repository/Tool Services
- Open-access knowledge base for patterns
- Wiki Site for Collaboration
- Industrial Outreach:
 - Build Links
 - Case Studies

Next Speaker (in 2):

ANA

Find out more about RePa

- RePa official page:

<http://www.utdallas.edu/~supakkul/rep13/>

- RePa Blog:

<http://repaworkshop.wordpress.com/>

- RePa @ Twitter:

<https://twitter.com/repaworkshop>

Next Speaker (in 1):

ANA

Current Speaker:

ANA

Next Speaker (in 6):

XAVIER



Comparing Modeling Approaches

Ana Moreira, Geri Georg, Gunter Mussbacher



- Goal of Workshop
 - Evaluate modeling approaches
 - Under which conditions are different approaches most applicable?
 - How can different approaches be successfully generalized and combined to achieve end-to-end methods?





- 3rd edition
- First time at RE (the first two at MODELS)
- Submit models of a focused case study
- Perform assessment based on comparison criteria





- Repository for Model Driven Development (ReMoDD)
 - Full models are available
 - Groups for each workshop with assessments
 - 13 modeling approaches
 - 19 assessments



Next Speaker (in 3):
XAVIER



- Results
 - **6 new modeling approaches** → 19 modeling approaches
 - **10 new assessments** → 29 assessments (1 paper submission with 4 assessments)
 - **Assessment form updated** to reflect the input from the requirements modelers



Next Speaker (in 2):
XAVIER



- In the Future
 - Analyses based on the accumulated assessments
 - Expand the number of covered modeling approaches
 - Expand the comparison criteria document
 - Tool support for searching the assessments / models



Next Speaker (in 1):
XAVIER

Current Speaker:
XAVIER



Third International Workshop on the Twin Peaks
of Requirements and Architecture

21st IEEE International Requirements Engineering Conference



Next Speaker (in 5):
AARON

Current Speaker: **XAVIER**

PROGRAM:

- ☐ 1 keynote
- ☐ 2 invited talks
- ☐ 5 papers presented
- ☐ 1-slide presentations
- ☐ Lots of discussion



Next Speaker (in 4): **AARON**

Current Speaker: **XAVIER**

TOPICS OF PAPERS:

- ❑ Documentation models
- ❑ Architectural tactics identification and application
 - ❑ MDD method for going reqts. → arch
 - ❑ Porting users' values into arch.
 - ❑ Relating constraints and ASRs



Next Speaker (in 3): **AARON**

Current Speaker:

XAVIER

MAIN RESULTS:

- ☐ The barrier among a requirement and a decision may be blur
- ☐ Context is important (no one-size-fits-all)
- ☐ Traceability needs to be kept balanced
- ☐ Current methods more focused on reqts.
→ arch.
- ☐ TwinPeaks model adapts to different problem and solution spaces
- ☐ Agile projects are key players today

International Workshop on the Twin Peaks
Requirements and Architecture
International Requirements Engineering Conference



Next Speaker (in 2):

AARON

Current Speaker:

XAVIER

OPEN ISSUES:

- ☐ Does this distinction exist at all?
- ☐ Which are the relevant contexts? How can be characterized?
- ☐ What does “balanced” mean?
- ☐ Do we need to explore more the transition arch. → reqts?
- ☐ How this works in some promising spaces (human values, EAs, ...)
- ☐ How do iterations work in agile projects?



Next Speaker (in 1):

AARON

Current Speaker:
AARON

Next Speaker (in 10):

—

RELAW 2013

Sixth International Workshop on Requirements
Engineering and Law

Aaron Massey
School of Interactive Computing
Georgia Tech



What is RELAW?

- RELAW is a **multi-disciplinary** workshop bringing together engineers and lawyers to discuss requirements engineering challenges for systems that must comply with **laws, regulations, or other policy documents.**

Stuff I stole from John Mylopoulos

- **Subject of Analysis:** Law (broadly), rather than requirements
- **Outcome of Analysis:** Requirements, rather than specifications
- **The Compliance Problem:** Given a law \mathcal{L} and requirements \mathcal{R} , find requirements \mathcal{R}' such that \mathcal{R}' is *acceptably close* to \mathcal{R} and \mathcal{R}' *complies* with \mathcal{L} .

Compliance Processes

In this session, we had papers that focused on...

- Creating a compliance process focusing on **outcomes rather than inputs** or intermediate steps
- **Mapping legal requirements to IT controls** / standards to avoid redesign and improve flexibility
- **Defining a high-level process** for legal requirements extraction with support for compliance checking

Modeling Regulations

In this session, we had papers that focused on...

- Using **benchmarks** to assess legal requirements models
- Integrating **Business Intelligence models** into a legal compliance process to improve decision making and outcomes
- Transforming regulations into **performance models** to coordinate decision making and improve measurement of compliance

Convergent Challenges

- RELAW participants are developing alternative methods to solve the same problem. **Is it time to begin merging these methods?**
 - Can we identify a common vocabulary?
 - ... common processes?
 - ... common outcomes?
 - ... common benchmarks / metrics?

Roundtable Discussion

- Do we need a special methodology for legal compliance?
- What should such a methodology look like?
- What particular tools would be needed?
- Will we need specialized personnel?
- What would a certification process look like?
Could it be conducted by independent third parties?

Organizing Chairs

- **Daniel Amyot**, University of Ottawa
- **Annie Antón**, Georgia Institute of Technology
- **Travis Breaux**, Carnegie Mellon University
- **Peter Swire**, Ohio State University

Program Committee (I)

- **Thomas Alspaugh**, Georgetown University
- **Dan Berry**, University of Waterloo
- **Jaelson Castro**, UFPE, Brazil
- **Eric Dubois**, Public Research Center Henri Tudor
- **Anthony Finkelstein**, University College London
- **Sepideh Ghanavati**, e-Health Ontario
- **Guido Governatori**, NICTA
- **Ivan Jureta**, FNRS, Brussels
- **Dimitris Karagiannis**, University of Vienna
- **Seok-Won Lee**, Ajou University, Republic of Korea
- **Luigi Logrippo**, Université du Québec en Outaouais

Program Committee (2)

- **Jeremy Maxwell**, North Carolina State University
- **John Mylopoulous**, University of Toronto
- **Mehrdad Sabetzadeh**, University of Luxembourg
- **Jessica Schmidt**, Northeastern University
- **Alberto Siena**, Free University of Bozen-Bolzano
- **Angelo Susi**, Fondazione Bruno Kessler
- **Wade Chumney**, Georgia Institute of Technology
- **Paul Otto**, Hogan Lovells LLP
- **Giovanni Sartor**, University of Bologna
- **Robert Sprague**, University of Wyoming