



7<sup>th</sup> International Conference on  
Research Challenges in Information Science

## RCIS 2013

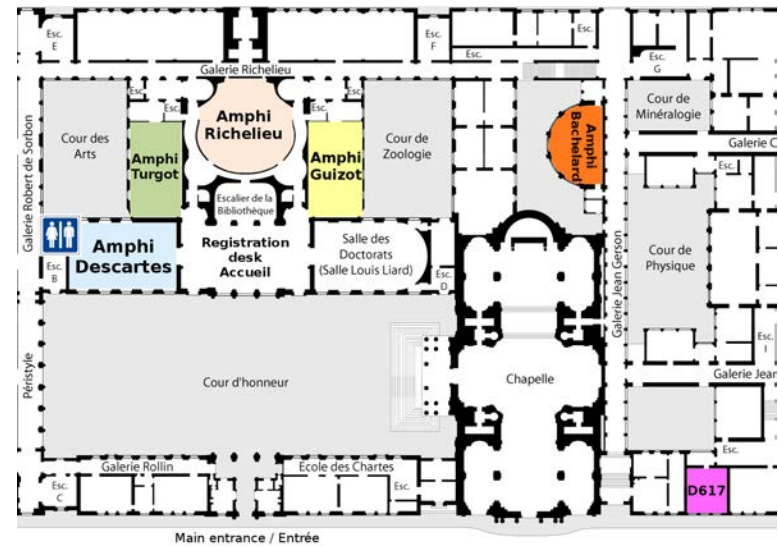
May 29-31, 2013, Paris, France

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## PROGRAMME

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### The Sorbonne





RCIS  
2013



## WELCOME

RCIS 2013 is a conference of RCIS CONFERENCE SERIES and is sponsored by IEEE French Section and IEEE French CS Joint Chapter.

The Seventh International Conference on Research Challenges in Information Science (RCIS) aims at providing an international forum for scientists, researchers, engineers and developers from a wide range of information science areas to exchange ideas and approaches in this evolving field. While presenting research findings and state-of-art solutions, you are especially invited to share experiences on new research challenges.

We are glad to welcoming you to Paris. We hope you will enjoy this conference and benefit from the scientific program but also from sharing your experiences with colleagues from all around the world.

Paris, May 29th 2013

Colette Rolland (General Chair)  
Roel Wieringa (Program Chair)  
Selmin Nurcan (Program Chair)

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### Financial Chair

Carine Souveyet, Université Paris 1 Panthéon-Sorbonne, France

## Keynote Speakers



John MYLOPOULOS, University of Trento, Italy  
[Requirements Models at Design- and Runtime](#)



Wil VAN DER AALST, Technische Universiteit Eindhoven, The Netherlands  
[Mediating Between Modeled and Observed Behavior: The Quest for the "Right" Process](#)



Klaus POHL, University of Duisburg-Essen, Germany  
[Internet of Services and Internet of Things: Challenges for Information Systems Engineering and Operation](#)

## Tutorials

### **Tutorial 1:** [Software Requirement Patterns](#)

Xavier Franch, Universitat Politècnica de Catalunya, Spain

### **Tutorial 2:** [Improvise your User Stories: Running a Creative co-Design Session](#)

Martin Mahaux, Patrick Heymans, PReCISE Research Centre University of Namur, Belgium

### **Tutorial 3:** [Focus Groups: Getting Practitioners Involved in Your Empirical Software Engineering/IS Research](#)

Maya Daneva, University of Twente, Netherlands

### **Tutorial 4:** [Test automation with models](#)

Marc-Florian Wendland, Ina Schieferdecker, Fraunhofer FOKUS, Germany

### **Tutorial 5:** [Cloud Computing](#)

Dan C. Marinescu, University of Central Florida, Orlando, USA

### **Tutorial 6:** [Business Intelligence: A Discussion on Platforms, Technologies, and Solutions](#)

Noushin Ashrafi, Jean-Pierre Kuilboer, University of Massachusetts Boston, USA

## SOCIAL EVENTS

### Welcome reception

The welcome reception will be held at the Palais du Luxembourg on May 29th.

The Palais du Luxembourg was built in the early 1600s for Marie de Medicis, King Louis XIII's mother. Although virtually nothing of the original interior remains intact today, the exterior is largely as it was when it was first built. The palace actually served as the precursor to the Louvre Museum in the mid-18th century before being used for a short time during the French Revolution as a prison. Napoleon later called it home, and it was during this time that the Palais du Luxembourg first became the place where the French Senate met.

The Palais du Luxembourg is situated on the Luxembourg gardens, which may well be one of the most successful parks in the world, partly because it is so well integrated into the fabric of the city around it, which makes it easily accessible. There are also many things to do there, evidenced by the wide range of people who use it: children, older people, Sorbonne students, people cutting through on a lunch break, RCIS 2013 conference participants enjoying Paris, etc. People come to stroll, play chess, to sit and read, people watch, to sit at one of the cafés or to bring their children or grandchildren to one of the many attractions for kids. Organized activities at the park include tennis, pony rides, puppet theatres, and toy sailboat rental (children float them in the large central fountain).



*Due to the presence of the French senate in the Palais du Luxembourg, there will be some security procedure to access the building. Please remember to bring your passport or any other identity document in order to have access to the welcome reception.*

## RCIS 2013 PROGRAMME

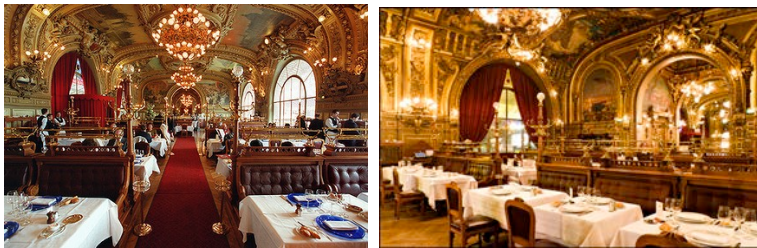
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### Gala dinner

The conference dinner will be held in the famous restaurant "Le train bleu" situated in the "Gare de Lyon" on May 30th.



"La Gare de Lyon" in Paris was built as part of the major building programme launched for the Paris Exhibition of 1900. The facade of the old station building bears some of the features of the style of the « Belle Epoque », but the most striking manifestation of that period has been preserved inside the building in the dining rooms of the Buffet. The decor of the station buffet, with its large ornate rooms, its many sculptures and gigantic paintings, is almost overwhelming, but the overall effect is a harmonious tribute to the distinctive style of the "Belle Epoque" period. The buffet has then been named after the famous train line going from Calais (connecting France to Great Britain) to the Méditerranée and nicknamed "Train bleu", due to its dark blue sleeping cars. It was opened in 1901 and was reputedly created to provide a comfortable place in which 'the English' could wait for their train. Its undoubted magnificence is the absolutely extravagant decor and 41 painted frescos on the walls and ceiling, detailing a scene from the railway networks or famous events from the 1900's.



### Wednesday, 29 May 2013

7:30-8.30 Registration

8:30-9:00 Conference Opening

#### 9:00-10:00

##### Keynote Talk – Requirements Models at Design- and Runtime

John MYLOPOULOS, University of Trento, Italy

Chair: Colette Rolland

Room: Richelieu

10:00-10:30 Coffee Break

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#### 10:30-12:30

##### Session 1: Requirements Engineering (1)

Chair: Régine Laleau

Room: Richelieu

- [Towards a Proposal to Capture Usability Requirements Through Guidelines](#), Yeshica Isela Ormeño, Jose Ignacio Panach Navarrete, Nelly Condori Fernández and Oscar Pastor López.
- [Collaborative Creativity in Requirements Engineering: Analysis and Practical Advice](#), Martin Mahaux, Olly Gotel, Alistair Mavin, Lemai Nguyen, Luisa Mich and Klaus Schmid.
- [Handling Requirements Dependencies in Agile Projects: A Focus Group with Agile Software Development Practitioners](#), Aias Martakis and Maya Daneva.
- [Goal Formalization and Classification for Requirements Engineering, Fifteen Years Later](#), Nicolas Prat.

#### 10:30-12:30

##### Session 2: Models & Model Driven Engineering

Chair: Mireille Blay-Fornarino

Room: Descartes

- [Pattern Based Methodology for UML profiles Evolution Management](#), Fadoi Lakhal, Hubert Dubois and Dominique Rieu.
- [Supporting organisational evolution by means of model-driven reengineering frameworks](#), Marcela Ruiz, Sergio España, Oscar Pastor Lopez and Arturo González.
- [M2Flex: a process metamodel for flexibility at runtime](#), Eric Ceret, Sophie Dupuy-Chessa and Gaelle Calvary.
- [Model Driven Development of a Generic Data Control Engine: an Industrial Experience \(S\)](#), Olivier Rosec.
- [Modelling Temporality and Subjectivity in ConML \(S\)](#), César González-Pérez.

12:30- 14:30 Lunch

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**14:30-16:00**

**Session 3: Business Intelligence & Decision Support**

Chair: Nicolas Prat

Room: Turgot

- **QUASL: A Framework for Question Answering and its Application to Business Intelligence**, *Nicolas Kuchmann-Beauger, Falk Brauer and Marie-Aude Aufaure.*
- **Adapting to Uncertain and Evolving Enterprise Requirements: The case of business-driven business intelligence**, *Eric Yu, Alexei Lapouchnian and Stephanie Deng.*
- **Business Alignment-Based Data Warehousing Physical Design Driven by Models**, *Jacques Simonin and Sébastien Bigaret.*

**14:30-16:00**

**DC Session 1: Methods**

Mentors: Jolita Ralyté (moderator), John Mylopoulos, Oscar Pastor

Room: Bachelard

- **The efficiency of strategic alignment - Determining the level of efficiency of the alignment of information systems with corporate strategy**, *Laure Jeannerot.*
- **Semi-automatic improvement of software development methods**, *Marko Janković.*
- **A process framework for managing implicit requirements using analogy based reasoning**, *Onyeka Emebo.*

**14:30-16:00**

**Tutorial 1: Software Requirement Patterns**, Xavier Franch

Room: Guizot

16:00-16:30 Coffee Break

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**16:30-18:00**

**Session 4: Information Systems & Services (1)**

Chair: César González-Pérez

Room: Turgot

- **A Multi-Agent System for Learner Assessment in Serious Games: application to learning processes in Crisis Management**, *M'Hammed Ali Oulhaci, Erwan Tranvouez, Sébastien Fournier and Bernard Espinasse.*
- **Towards Constraint-Informed Information Systems**, *Irene Rodrigues, Nuno Matos, Salvador Abreu, Rebecca Deneckère and Daniel Diaz.*
- **Adapting WS-BPEL scenario execution using collaborative filtering techniques**, *Margaris Dionisis, Panagiotis Georgiadis and Costas Vassilakis.*

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**16:30-18:30**

**Session 5: Ontologies and Data**

Chair: Oscar Pastor

Room: Guizot

- **Be Careful When Designing Semantic Databases: Data and Concepts Redundancy**, *Chedlia Chakroun, Ladjel Bellatreche, Yamine Ait Ameer, Nabila Berkani and Stéphane Jean.*
- **An Ontological Foundation for Conceptual Modeling Datatypes based on Semantic Reference Spaces**, *Antognoni Albuquerque and Giancarlo Guizzardi.*
- **Automatic Generation of Ontology from Data Models: A Practical Evaluation of Existing Approaches**, *Bouchra El Idrissi, Salah Baïna and Karim Baïna.*
- **Ontology Enhanced Mining of Multidimensional Association Rules from Data Warehouses**, *Hanen Brahmi and Sadok Ben Yahia.*

**16:30-18:30**

**Tutorial 2: Improve your User Stories: Running a Creative co-Design Session**, Martin

Mahaux, Patrick Heymans

Room: D617

**19:30**

**Welcome Reception**

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**Thursday, 30 May 2013**

8:00-9:00 Registration

**9:00-10:00**

**Keynote Talk – Mediating Between Modeled and Observed Behavior: The Quest for the "Right" Process**

Wil VAN DER AALST, Technische Universiteit Eindhoven, The Netherlands

Chair: Selmin Nurcan

Room: Richelieu

10:00-10:30 Coffee Break

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**10:30-12:30**

**Session 6: User centered approaches (1)**

Chair: Sophie Chessa-Dupuy

Room: Richelieu

- **Monitoring User-System Interactions through Graph-Based Intrinsic Dynamics Analysis**, Sébastien Heymann and Bénédicte Le Grand.
- **Re-Engineering Graphical User Interfaces from their Resource Files with UsiResourcer**, Oscar Sanchez, Jean Vanderdonck and Jesus Garcia Molina.
- **Formalizing an empirical model: a way to enhance the communication between users and designers**, Pierre-Emmanuel Arduin, Michel Grundstein, Elsa Negre and Camille Rosenthal-Sabroux.
- **Integrating accessibility as a quality property in web developments**, Marine Reichling and Samira Si-Said Cherfi.

**10:30-12:30**

**Session 7: Business Processes (1)**

Chair: Wil van der Aalst

Room: Descartes

- **V-BPMI: a Variability-oriented Framework for Web-based Business Processes Modeling and Implementation**, Renaud Angles, Philippe Ramadour, Corine Cauvet and Sophie Rodier.
- **A Taxonomy for Assessing Security in Business Process Modelling**, Naved Ahmed and Raimundas Matulevicius.
- **Bi-criteria strategies for business processes scheduling in Cloud environments with fairness metrics**, Kahina Bessai, Samir Youcef, Ammar Oulamara and Claude Godart.
- **Exploring the Alloy Operational Semantics for Case Management Process Modeling**, Irina Rychkova.

12:30- 14:30 Lunch

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**14:30-16:00**

**Session 8: Requirements Engineering (2)**

Chair: Camille Salinesi

Room: Richelieu

- **A Requirements-Based Approach for Representing Micro-business Patterns**, R.J. Macasaet, Manuel Noguera, Maria Luisa Rodriguez, Jose Luis Garrido, Sam Supakkul and Lawrence Chung.
- **Transforming Creative Requirements into Conceptual Models**, Fernando Wanderley, Denis Silveira, Joao Araujo and Ana Moreira.
- **An Integrated Approach of AHP and NFRs Framework**, Mohamad Kassab.

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**14:30-16:00**

**DC Session 2: Process Handling**

Mentors: Xavier Franch (moderator), Jolita Ralyté, Oscar Pastor

Room: Bachelard

- **Event Processing with Dynamically Changing Focus**, Marc Schaaf.
- **Contextual recommendations using intention mining on process traces** Ghazaleh Khodabandelou.
- **Bridging the Gap between Social Software and Business Process Management: A Research Agenda**, Matheus Hauder.

**14:30-16:00**

**Tutorial 3: Focus Groups: Getting Practitioners Involved in Your Empirical Software**

Engineering/IS Research, Maya Daneva

Room: Turgot

16:00-16:30 Coffee Break

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**16:30-18:00**

**Session 9: ICT Acceptance**

Chair: Said Assar

Room: Richelieu

- **Responsible Research and Innovation: Critical reflection into the potential social consequences of ICT**, Grace Eden, Marina Jirotko and Bernd Stahl.
- **Determining factors in ICT adoption by MSME's in agriculture clusters**, Gianluigi Viscusi, Federico Cabitza, Andrea Maurino and Fabio Stella.
- **Factors fostering IT Acceptance by nurses in Morocco (S)**, Az-Eddine Bennani and Rachid Oumlil.

**16:30-18:00**

**Session 10: User centered approaches (2)**

Chair: André Flory

Room: Turgot

- **A Computational Framework for Context-aware Adaptation of User Interfaces**, Vivian Genaro Motti and Jean Vanderdonck.
- **A New Event Dispatch Strategy to Eliminate Dispatch "Glue"**, Anthony Allevato and Stephen Edwards.

**16:30-18:00**

**Tutorial 4: Test automation with models**, Marc-Florian Wendland, Ina Schieferdecker

Room: Guizot

**20:00**

**Gala Dinner**

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## Friday, 31 May 2013

8:00-9:00 Registration

9:00-10:00

**Keynote Talk – Internet of Services and Internet of Things: Challenges for Information Systems Engineering and Operation**

Klaus POHL, University of Duisburg-Essen, Germany

Chair: Roel Wieringa

Room: Richelieu

10:15-10:45 Coffee Break

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10:30-12:30

**Session 11: Information Search & Discovery**

Chair: Florence Sedes

Room: Richelieu

- **Supervised Intentional Process Models Discovery using Hidden Markov Models**, Ghazaleh Khodabandelou, Charlotte Hug, Rebecca Deneckère and Camille Salinesi.
- **Towards a hybrid algorithm for extracting maximal frequent conceptual links in social networks**, Erick Stattner and Martine Collard.
- **Extensible Document-Based Model Web Engineering**, Jean-Marc Lecarpentier, Romain Brixtel, Hervé Le Crosnier and Cyril Bazin.
- **Cold-Start recommender system problem within a multidimensional data warehouse**, Elsa Negre, Franck Ravat, Olivier Teste and Ronan Tournier.

10:30-12:30

**Session 12: Information Systems & Services (2)**

Chair: Pericles Loucopoulos

Room: Descartes

- **Monitoring Mobile Cyber-Physical Systems by Means of a Knowledge Discovery Cycle**, Tino Noack and Ingo Schmitt.
- **Using Goals and Customizable Services to Improve Adaptability of Process-based Service Compositions**, Joseph Gillain, Stéphane Faulkner, Ivan Jureta and Monique Snoeck.
- **Towards Automated Analysis of Fads and Trends in Information Systems Research - Concept, Implementation and Exemplary Application in the Context of Business Process Management Research**, Constantin Houy, Khulan Sainbuyan, Peter Fettke and Peter Loos.
- **Service Level Agreements in Municipal IT Dependability Management**, Kim Weyns and Martin Höst.

12:30-12:45: Best Paper Award

12:45- 14:30 Lunch

14:30-16:00

**Session 13: Web & Networks**

Chair: Bénédicte Le Grand

Room: Guizot

- **Efficient Events Identification from Social Media RSS Feeds**, Chiraz Trabelsi and Sadok Ben Yahia.
- **Leveraging Crowdsourced Knowledge for Web Data Clouds Empowerment**, Silvana Castano, Lorenzo Genta and Stefano Montanelli.
- **Centrality-based peer rewiring in semantic overlay networks (S)**, Yulian Yang, Sylvie Calabretto and Lionel Brunie.

14:30-16:00

**Posters & Demos Session**

Chair: Martine Collard and César González-Pérez

Room: D617

**Posters**

- **Business Analytics in Innovation and Product Lifecycle Management**, Clotilde Rohleder, Indra Kusumah, Jing Lin and Gülru Özkan.
- **Constructing Method Families Based on the Variability Analysis**, Elena Kornyshova, Jolita Ralyté and Rébecca Deneckère.
- **An Overview of a SysML Extension for Goal-oriented NFR Modelling**, Christophe Gnaho, Farida Semmak and Régine Laleau.
- **Empirical Evaluation of UML-based Model-Driven Techniques**, Maurizio Leotta, Filippo Ricca, Marco Torchiano and Gianna Reggio.
- **Towards Predictive Cost Models for Cloud Ecosystems**, Karsten Molka and James Byrne.
- **Towards an Ontology-based Scientific Knowledge Infrastructure for Information Systems Research**, Constantin Houy, Sven Kaiser, Peter Fettke and Peter Loos.
- **Toward Understanding Analogical Mapping and Ideological Cataloguing in the Brain**, Newton Howard.
- **A Case Study for Understanding the Organization of Distributed Problem-Solving within the Mozilla's Community**, Héla Masmoudi and Imed Boughzala.

**Demonstrations**

- **Stimulus-Response Tests: An Applied Demonstration**, Carolyn Matheus and Justin Svegliato.
- **TESSI: A Web Service Testing Tool**, Dessislava Petrova-Antonova, Sylvia Ilieva and Vera Stoyanova.
- **A Massive Generation of IR Runs**, Jonathan Louedec and Josiane Mothe.

- **TempoSpring: a new immersive hands-free prototype for visualizing social networks**, *Nicolas Greffard, Fabien Picarougne and Pascale Kuntz.*
- **Implementation of Prototype for Interoperability between BIM and GIS**, *Jung-Rae Hwang, Changhee Hong and Hyun-Sang Choi.*
- **CombiS-BP Editor: Combining Declarative and Imperative Languages in BP Modelling**, *Luisa Parody, María Teresa Gómez López, Rafael M. Gasca and Angel Jesus Varela Vaca.*

**14:30-16:00**

**Tutorial 5: Cloud Computing**, Dan C. Marinescu

Room: Turgot

16:00-16:30 Coffee Break

**16:30-18:00**

**Session 14: Business Processes (2)**

Chair: Samira Si-Said Cherfi

Room: Descartes

- **Autonomic Protocol-based Coordination in Dynamic Inter-Organizational Workflow**, *Wassim Bouaziz and Eric Andonoff.*
- **Adaptation Patterns for Service Based Inter-Organizational Workflows**, *Saida Boukhedouma, Mourad Oussalah, Zaia Alimazighi and Dalila Tamzalit.*
- **Using model checking to control the structural errors in BPMN models**, *Oussama Mohammed Kherbouche, Adeel Ahmad and Henri Basson.*

**16:30-18:00**

**DC Session 3: Collaboration and learning systems**

Mentors: Colette Rolland (moderator), Roel Wieringa, Selmin Nurcan

Room: Bachelard

- **Accessible Chats for Computer Supported Collaborative Learning Environments in Mobile Devices**, *Rocio Calvo.*
- **Computer Mediated Collaboration among the Academic Research Community in Developing Countries: A Case Study of Kenya**, *Petronilla Muriithi.*

**16:30-18:00**

**Tutorial 6: Business Intelligence: A Discussion on Platforms, Technologies, and Solutions**,

Noushin Ashrafi, Jean-Pierre Kuilboer

Room: Richelieu

**18:00 Closing**

Room: Descartes

9:00-18:00: **3rd FITTEST Industrial day - Get Fit for testing the Future Internet**

**Thanks to**

