

## **15<sup>th</sup> International Conference on Web Engineering**

## "Engineering the Web in the Big Data Era"

Rotterdam, the Netherlands – June 23-26, 2015

http://icwe2015.webengineering.org/

# **Conference Program**

#### **Location and Venues**

The conference venue of **ICWE 2015** is the **Beurs-World Trade Center** which is located in the center of Rotterdam at **Beursplein 37**. The Beurs-World Trade Center is easily reached by subway (*"Beurs"* station) and is 15 minutes' walk from Rotterdam Central Station.

All tracks will be held inside the main building of the Beurs-World Trade Center. The plenary room is Van Oldenbarnevelt. Parallel sessions occur in the Goudriaan Room I, Leeuwen Room II, and Penn Room I on Tuesday, and Van Oldenbarnevelt and Goudriaan I & II on Wednesday, Thursday, and Friday. The registration, coffee breaks, lunches, and



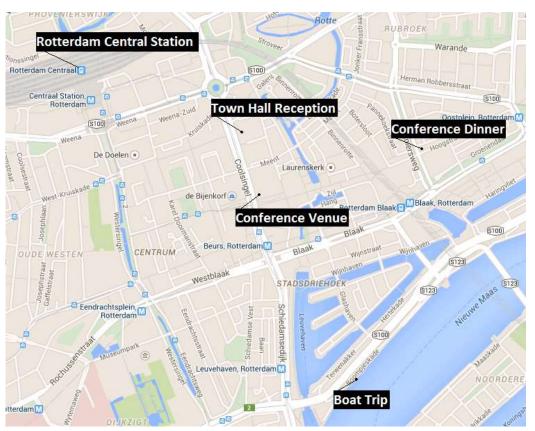
demos/posters session are taking place in the **Lloyd's Lobby**. At the end of the conference program you can find maps indicating the location of the conference rooms and lobby in the Beurs-World Trade Center.

#### Social Events

Tuesday, June23<sup>rd</sup>201518:00-19:30:TheWalkingTourRotterdamwillstartfromBeurs-WorldTradeCenter and will end atBeurs-World TradeCenter.

Wednesday, June 24<sup>th</sup> 2015 18:30-20:00: The Welcome Reception will occur at the Rotterdam City Hall, Coolsingel 40, 5 minutes' walk from Beurs-World Trade Center.

Thursday, June25th201519:00-23:30:The ConferenceDinnerwill be held in theItalianrestaurantO'Pazzo,Mariniersweg90,10minutes'walkfromBeurs-



World Trade Center. At this occasion prizes will be given to best paper, demo, and poster.

<u>Friday, June 26<sup>th</sup> 2015 14:45-19:00:</u> The **Boat Trip** will start after lunch. The Nehalennia boat will depart from **Boompjeskade 123**, 20 minutes' walk from Beurs-World Trade Center. We will sail from Rotterdam to Kinderdijk. On the return voyage to Rotterdam, you can enjoy the breathtaking skyline of Rotterdam. We will return to the same place we started cruising from.

## Day 1 – Tuesday, June 23<sup>rd</sup> 2015

| 08:00 - 09:00 | Registration  |
|---------------|---|
| 09:00 - 10:30 | <b>PEWET 2015 Workshop Session 1: Internet Technologies, Services, and Data Management</b> ( <i>Chair: Fernando Ferri</i> )   |
|               | <b>Keynote "Fractally-organized Connectionist Networks: Conjectures and Preliminary Results"</b> by <b>Vincenzo De Florio</b> , MOSAIC/University of Antwerp and MOSAIC/iMinds Research Institute, Belgium        |
|               | Internet-based Enterprise Innovation through a Community-based API Builder to Manage APIs. Romanos<br>Tsouroplis, Michael Petychakis, Iosif Alvertis, Evmorfia Biliri, Fenareti Lampathaki, and Dimitris Askounis |
|               | End-User Centered Events Detection and Management in the Internet of Things. Stefano Valtolina,<br>Barbara Rita Barricelli, and Marco Mesiti  |
|               | ICT: A Survey on Redeem to Greenify Data Center and Human Constitution Turnaround. S. Aravinth<br>Kumar, Reecha Sharma, and Avinash Kumar   |
|               | (Goudriaan Room I)  |
| 09:00 - 10:30 | NLPIT 2015 Workshop Session 1: Information Extraction for Informal Text (Chair: Maurice van Keulen)   |
|               | Keynote "Hacking a Way through the Twitter Language Jungle: Syntactic Annotation, Tagging, and Parsing of English Tweets" by Nathan Schneider, University of Edinburgh, UK  |
|               | Introduction of N-gram into a Run-Length Encoding based ASCII Art Extraction Method. <i>Tetsuya Suzuki</i><br>(Leeuwen Room II)   |
| 09:00 - 10:30 |   |
| 05.00 10.50   | Westminster, UK   |
| 40.00 44.00   | (Penn Room I)   |
| 10:30 - 11:00 | Coffee Break  |
| 11:00 – 12:30 | <b>PEWET 2015 Workshop Session 2: Web Programming, Application and Pervasive Services</b> (Chair: Vincenzo de Florio)   |
|               | Perspectives and Methods in the Development of Technological Tools for Supporting Future Studies in Science and Technology. <i>Davide Di Pasquale and Marco Padula</i>  |
|               | Responding to Retrieval: A Proposal to Use Retrieval Information for Better Presentation of Website Content. C Ravindranath Chowdary, Anil Kumar Singh, and Anil Nelakanti  |
|               | X-wrappers: Flexible Libraries for Customizing and Developing Web-software's. Furqan Ahmed khan,<br>Zakiya Manzoor Khan, and Richa Sharma   |
|               | Proposals for Modular Asynchronous Web Programming: Issues & Challenges. <i>Hiroaki Fukuda and Paul Leger</i>   |
|               | (Goudriaan Room I)  |
| 11:00 - 12:30 | NLPIT 2015 Workshop Session 2: Linguistic Analysis of Dialects (Chair: Florian Kunneman)  |
|               | Constructing Linguistic Resources for the Tunisian Dialect using Textual User-Generated Contents on the Social Web. Jihene Younes, Hadhemi Achour and Emna Souissi  |
|               | SMT: A Case Study of Kazakh-English Word Alignment. Amandyk Kartbayev   |
|               | Spanish Treebank Annotation of Informal Non-Standard Web Text. Mariona Taulé, M. Antonia Martí, Ann Bies, Aina Garí, Montserrat Nofre, Zhiyi Song, Stephanie Strassel, and Joe Ellis                              |
|               | (Leeuwen Room II)   |
| 11:00 - 12:30 | <b>Enabling the Web of (Linked Open) Data Tutorial Session 2</b> by <b>Epaminondas Kapetanios</b> , University of Westminster, UK   |
|               | (Penn Room I)   |
| 12:30 - 14:00 | Lunch   |
| 14:00 - 15:30 | Rapid Mashup Challenge 2015 Session 1: Opening and Challenge (Chair: Cesare Pautasso)<br>Opening  |
|               | Extended Data Mashups: Extended Techniques for Flexible Modeling and Execution of Data Mashups.<br>Pascal Hirmer and Bernhard Mitschang   |
|               |   |

UI-Oriented Computing: Interactive, Live Mashup Development through UI-Oriented Computing: Anis Nouri and Florian Daniel

SmartComposition: Extending Web Applications to Multi-Screen Mashups: *Michael Krug, Fabian Wiedemann, and Martin Gaedke* 

(Goudriaan Room I)

## **14:00 – 15:30** SoWeMine 2015 Workshop Session 1: Information and Knowledge Mining in the Social Web (*Chair: Spiros Sirmakessis*)

Mining the Social Web: Introduction to Workshop Activities. Spiros Sirmakessis

Sensing Airports' Traffic by Mining Location Sharing Social Services. John Garofalakis, Ioannis Georgoulas, Andreas Komninos, Periklis Ntentopoulos, and Athanasios Plessas

An Approach for Mining Social Patterns in the Conceptual Schema of CMS-based Web Applications. *Vassiliki Gkantouna, Athanasios Tsakalidis, Giannis Tzimas, and Emmanouil Viennas* 

An E-recruitment System Exploiting Candidates' Social Presence. Evanthia Faliagka, Maria Rigou, and Spiros Sirmakessis

(Leeuwen Room II)

#### 14:00 – 15:30 The Web of Data for E-Commerce: Schema.org and GoodRelations for Researchers and Practitioners Tutorial Session 1 by Martin Hepp, Universität der Bundeswehr Munich, Germany

(Penn Room I)

#### 15:30 – 16:00 Coffee Break

**16:00 – 17:30** Rapid Mashup Challenge 2015 Session 2: Challenge and Proclamation of Winner (*Chair: Florian Daniel*) EFESTO: A Platform for the End-User Development of Interactive Workspaces for Data Exploration. *Giuseppe Desolda, Carmelo Ardito, and Maristella Matera* 

WebMakeup: Empowering Users to Mod Websites. Oscar Diaz, Iñigo Aldalur, Cristobal Arellano, Haritz Medina, and Sergio Firmenich

WLS: Mashup Development with Web Liquid Streams. Masiar Babazadeh, Andrea Gallidabino, and Cesare Pautasso

Closing

(Goudriaan Room I)

#### **16:00 – 17:30** SoWeMine 2015 Workshop Session 2: Mining the Tweets (Chair: Spiros Sirmakessis)

#nowplaying on #Spotify: Leveraging Spotify Information on Twitter for Artist Recommendations. *Martin Pichl, Eva Zangerle, and Günther Specht* 

Retrieving Relevant and Interesting Tweets during Live Television Broadcasts. *Rianne Kaptein, Yi Zhu, Gijs Koot, Judith Redi, and Omar Niamut* 

Topic Detection in Twitter using Topology Data Analysis. *Pablo Torres-Tramon, Hugo Hromic, and Bahareh Heravi* 

Open Discussion on Mining the Social Web coordinated by Spiros Sirmakessis

(Leeuwen Room II)

#### **16:00 – 17:30** The Web of Data for E-Commerce: Schema.org and GoodRelations for Researchers and Practitioners **Tutorial Session 2** by **Martin Hepp**, Universität der Bundeswehr Munich, Germany

(Penn Room I)

#### 18:00 – 19:30 Social Event 1: Walking Tour Rotterdam

The walking tour starts at the conference venue and ends at the conference venue. The enthusiastic guides of Rotterdam Discovery Tours will proudly show you the city and tell you about the architecture, the history, the art, the culture, and the ports. The guides know many hidden spots and, when possible, will take you inside some special buildings.

## Day 2 – Wednesday, June 24<sup>th</sup> 2015

08:00 – 09:00 Registration

## 09:00 – 09:10 Opening Session (Chair: Flavius Frasincar)

09:10 – 10:30 Keynote "Sentiment Strength Detection for Social Media Text: Artificial Agents, Answer Ranking, and Art Installations" by Mike Thelwall, University of Wolverhampton, UK (Chair: Flavius Frasincar)

This talk describes a simple, fast, intuitive, and flexible lexical method to detect sentiment strength in short informal text and will illustrate it with a range of research and commercial applications. Implemented in the software SentiStrength and optimised for social Web text, the method can process 14,000 tweets per second with human level accuracy in many cases. The talk presents and demonstrates the method and its evaluations, and shows how it has been translated from the original English version to many other languages. It is free for researchers to use and its current applications include art installations, answer ranking, opinion mining, stock market prediction, customer feedback analysis, and sentiment-aware artificial agents.

(Van Oldenbarnevelt Room)

| 10:30 - 11:00 | Coffee Break   |
|---------------|--|
| 11:00 - 12:30 | Technical Session I: Social Web Data Exploration (Chair: Jaap Kamps)   |
| 11:00 - 11:30 | Raimond: Quantitative Data Extraction from Twitter to Describe Events. <i>Thibault Sellam and Omar Alonso</i> [full paper]   |
| 11:30 - 12:00 | Beomap: Ad Hoc Topic Maps for Enhanced Exploration of Social Media Data. <i>Martin Leginus, Chengxiang Zha,i and Peter Dolog</i> [full paper]  |
| 12:00 - 12:30 | A K-shell Decomposition Based Algorithm for Influence Maximization. <i>Qian Zhao, Hongwei Lu, Zaobin Gan, and Xiao Ma</i> [full paper]   |
|               | (Van Oldenbarnevelt Room)  |
| 11:00 - 12:30 | Technical Session II: Web Application Modeling (Chair: Martin Gaedke)  |
| 11:00 - 11:30 | Mixing and Mashing Website Themes. Linda Di Geronimo, Alfonso Murolo, Michael Nebeling, and Moira Norrie [full paper]  |
| 11:30 - 12:00 | Identifying Inter-Component Control-Flow in Web Applications. William G.J. Halfond [full paper]  |
| 12:00 - 12:30 | asqium: A JavaScript Plugin Framework for Extensible Client and Server-side Components. <i>Vasileios Triglianos and Cesare Pautasso</i> [full paper]   |
|               | (Goudriaan Room I & II)  |
| 12:30 - 14:00 | Lunch  |
| 14:00 - 15:30 | Technical Session III: Social Web Data Personalization (Chair: Alessandro Bozzon)  |
| 14:00 - 14:30 | Using Query-Log Based Collective Intelligence to Generate Query Suggestions for Tagged Content Search. <i>Dirk Guijt and Claudia Hauff</i> [full paper]  |
| 14:30 - 15:00 | TV Goes Social: Characterizing User Interaction in an Online Social Network for TV Fans. <i>Pedro H. F. Holanda, Bruno Guilherme, Ana Paula Couto Da Silva, and Olga Goussevskaia</i> [full paper] |
| 15:00 - 15:30 | Transforming Collaboration Structures into Deployable Informal Processes. C. Timurhan Sungur, Christoph Dorn, Schahram Dustdar, and Frank Leymann [full paper]                                     |
|               | (Van Oldenbarnevelt Room)  |
| 14:00 - 15:30 | Technical Session IV: Web Application Design (Chair: Marco Winckler)   |
| 14:00 - 14:15 | Beyond Graph Search: Exploring and Exploiting Rich Connected Data Sets. <i>Omar Alonso and Jaap Kamps</i> [position paper]   |
| 14:15 - 14:30 | Leveraging Social Patterns in Web Application Design. <i>Devis Bianchini, Valeria De Antonellis, and Michele Melchiori</i> [position paper]  |
| 14:30 - 14:45 | Liquid Stream Processing across Web Browsers and Web Servers. <i>Masiar Babazadeh, Andrea Gallidabino, and Cesare Pautasso</i> [position paper]  |
| 14:45 - 15:00 | Deriving Custom Post Types from Digital Mockups. Alfonso Murolo and Moira Norrie [position paper]  |
| 15:00 - 15:15 | CrowdSTAR: A Social Task Routing Framework for Online Communities. Besmira Nushi, Omar Alonso,   |

#### 15:30 – 16:00 Coffee Break

#### 16:00 – 18:00 Demos/Posters and PhD Posters Session

#### Demos

- D1. Designing and Developing Context-Aware Mobile Mashups: the CAMUS Approach. Fabio Corvetta, Maristella Matera, Riccardo Medana, Elisa Quintarelli, Vincenzo Rizzo, and Letizia Tanca
- D2. Release Adolescent Stress by Virtual Chatting. Yang Zhang, Jun Pang, Jing Huang, Qi Li, Yuanyuan Xue, Taoran Cheng, Shuangqing Xu, Jia Jia, and Ling Feng
- D3. Conflict Resolution in Collaborative User Interface Mashups. *Michael Hertel, Alexey Tschudnowsky, and Martin Gaedke*
- D4. Supporting the Development of Team-Climate-Aware Collaborative Web Applications. *Sebastian Heil, Marco Drechsel, and Martin Gaedke*
- D5. Leveraging Social Data for Health Care Behavior Analytics. *Xiang Ji, Paolo Cappellari, Soon Chun, and James Geller*
- D6. Collaborative Drawing Annotations on Web Videos. István Koren, Petru Nicolaescu, and Ralf Klamma
- D7. Yjs: A Framework for Near Real-Time P2P Shared Editing on Arbitrary Data Types. *Petru Nicolaescu, Kevin Jahns, Michael Derntl, and Ralf Klamma*
- D8. OSMoSys: A Web Interface for Graph-Based RDF Data Visualization and Ontology Browsing. Achilleas Psyllidis
- D9. Loop Discovery in Publish-Subscribe-Based User Interface Mashups. Alexey Tschudnowsky and Martin Gaedke
- D10. NeLMeS: Finding the Best Based on the People Available Leveraging the Crowd. *Fabian Wiedemann, Ralph Sontag, and Martin Gaedke*
- D11. E-WISE: an Expertise-Driven Recommendation Platform for Web Question Answering Systems. *Jie Yang, Alessandro Bozzon, and Geert-Jan Houben*
- D12. Getting the Query Right: User Interface Design of Analysis Platforms for Crisis Research. *Mario Barrenechea, Kenneth Anderson, Ahmet Aydin, Mazin Hakeem, and Sahar Jambi* [volunteer demo]
- D13. Tilt-and-Tap: Framework to Support Motion-Based Web Interaction Techniques. *Linda Di Geronimo, Ersan Aras, and Moira Norrie* [volunteer demo]
- D14. Harnessing WebGl and WebSockets for a Web-Based Collaborative Graph Exploration Tool. *Björn Zimmer and Andreas Kerren* [volunteer demo]
- D15. YQL as a Platform for Linked-Data Wrapper Development. *Jon Iturrioz, Iker Azpeitia, and Oscar Diaz* [volunteer demo]
- D16. Distributed Service Discovery in Mobile IoT Environments Using Hierarchical Bloom Filters. *Hyeon-Jun Jo, Jung-Hyun Kwon, and In-Young Ko* [volunteer demo]
- D17. asqium: A JavaScript Plugin Framework for Extensible Client and Server-side Components. *Vasileios Triglianos and Cesare Pautasso* [volunteer demo]
- D18. Liquid Stream Processing across Web Browsers and Web Servers. *Masiar Babazadeh, Andrea Gallidabino, and Cesare Pautasso* [volunteer demo]
- D19. Towards Liquid Web Applications. *Tommi Mikkonnen, Kari Systa, and Cesare Pautasso* [volunteer demo]
- D20. MIRROR: Automatic R2RML Mapping Generation from Relational Databases. *Luciano Frontino De Medeiros, Freddy Priyatna, and Oscar Corcho* [volunteer demo]

#### Posters

- P1. Detaching Control from Data Models in Model-Based Generation of User Interfaces. *Giorgio Brajnik and Simon Harper*
- P2. Graph-Based Methods for Clustering Topics of Interest in Twitter. *Hugo Hromic, Narumol Prangnawarat, Ioana Hulpus, Marcel Karnstedt, and Conor Hayes*
- P3. Towards Strategy Patterns for Evaluating Usability. Belen Rivera, Pablo Becker, Philip Lew, and Luis Olsina
- P4. Scope-Aware Delegations in Distributed Social Networks. Anna Scholtz, Stefan Wild, and Martin Gaedke
- P5. Balancing Isolation and Sharing of Data for Third-Party Extensible App Ecosystems. *Florian Schröder, Raphael M. Reischuk, and Johannes Gehrke*
- P6. An Empirical Study of the Use of Multi-Dimensional Contexts for Collaborative-Filtering-Based Service Recommendations in IoT Environments. *Joo-Sik Son, Han-Gyu Ko, and In-Young Ko*

P7. Approximate Continuous Query Answering over Streams and Dynamic Linked Data Sets. Soheila Dehghanzadeh, Daniele Dell'Aglio, Shen Gao, Emanuele Della Valle, Alessandra Mileo, and Abraham Bernstein [volunteer poster]

#### PhD Posters

- P8. Distributed Transaction Model for Read-Write Linked Data Applications. *Nandana Mihindukulasooriya, Raul Garcia-Castro, and Asuncion Gomez-Perez*
- P9. Secure Storing of e-Health Records in the Cloud. *Fabian Wiedemann and Martin Gaedke*
- P10. Knowledge Crowdsourcing Acceleration. Jie Yang, Alessandro Bozzon, and Geert-Jan Houben
- P11. Community-Driven Social Influence Analysis and Applications. Yang Zhang and Jun Pang

(Lloyd's Lobby)

#### 18:30 – 20:00 Social Event 2: Welcome Reception

The welcome reception will be held at the Rotterdam city hall, Coolsingel 40, 5 minutes' walk from the conference venue. In 1905, because of increasing lack of space, the council of Rotterdam decided for the construction of a new city hall. 15 years later, the neo-Renaissance building with Romanesque, Byzantine, and Art Deco influences was completed. The monumental city hall is not only richly decorated, it also houses a large collection of fine art. In contrast to many other buildings in Rotterdam, it was not destroyed during the Second World War (1940-1945). In this historical building, a representative of the Rotterdam City Council will welcome you in Rotterdam.

## Day 3 – Thursday, June 25<sup>th</sup> 2015

08:00 – 09:00 Registration

09:00 – 10:30 Keynote "Making the Web Searchable", by Peter Mika, Yahoo! Labs, UK (Chair: Daniel Schwabe)

The key idea of the Semantic Web is to make information on the Web easily consumable by machines. As machines start to understand Web pages as sources of data, search on the Web will move well beyond the current paradigm of retrieving pages by keywords. Instead, search engines will start to answer complex queries based on the cumulative knowledge of the Web. In this presentation, we review the brief history of Semantic Search in academic research and in developments across the search industry. We also look ahead to highlight the research challenges that have surfaced and remain unsolved.

(Van Oldenbarnevelt Room)

| 10:30 - 11:00 | Coffee Break   |
|---------------|--|
| 11:00 - 12:30 | Technical Session V: Semantic Web Technologies and Applications (Chair: Oscar Diaz)  |
| 11:00 - 11:30 | MIRROR: Automatic R2RML Mapping Generation from Relational Databases. <i>Luciano Frontino De Medeiros, Freddy Priyatna, and Oscar Corcho</i> [full paper]    |
| 11:30 - 12:00 | A Quantitative Comparison of Semantic Web Page Segmentation Approaches. <i>Robert Kreuzer, Jurriaan Hage, and Ad Feelders</i> [full paper]                   |
| 12:00 - 12:30 | A Semantic Framework for Sequential Decision Making. <i>Patrick Philipp, Maria Maleshkova, Achim Rettinger, and Darko Kati</i> [full paper]                  |
|               | (Van Oldenbarnevelt Room)  |
| 11:00 - 12:30 | Technical Session VI: Web Composition and Mashups (Chair: Cesare Pautasso)   |
| 11:00 - 11:30 | REST Web Service Description for Graph-Based Service Discovery. <i>Rosa Alarcon, Rodrigo Saffie, Nikolas Bravo, and Javiera Cabello</i> [full paper]         |
| 11:30 - 12:00 | Distributed Service Discovery in Mobile IoT Environments Using Hierarchical Bloom Filters. <i>Hyeon-Jun Jo, Jung-Hyun Kwon, and In-Young Ko</i> [full paper] |
| 12:00 - 12:30 | A Methodology and Tool Support for Widget-Based Web Application Development. <i>Petru Nicolaescu and Ralf Klamma</i> [full paper]                            |
|               | (Goudriaan Room I & II)  |

| 17.50 10.50                           | (Van Oldenbarnevelt Room)   |
|---------------------------------------|---|
| 17:30 - 18:30                         | ISWE Members Meeting  |
|                                       | Celino<br>( Goudriaan Room I & II)  |
| 17:15 – 17:30                         | Fostering Innovation through Coopetition: The E015 Digital Ecosystem. Maurilio Zuccala and Irene  |
| 17:00 - 17:15                         | The Inclusive Enterprise: Vision and Roadmap. <i>Robert-Jan Sips, Alessandro Bozzon, Gerard Smit, and</i><br>Geert-Jan Houben   |
| 16:45 – 17:00                         | Interactive Networks for Digital Cultural Heritage Collections: Scoping the Future of HistoGraph. <i>Marten Düring, Lars Wieneke, and Vincenzo Croce</i>  |
| 16:30 - 16:45                         | Personal, Social, and Event Organization through Web and Mobile Apps: the Fluxedo Case. Max<br>Bancora, Marco Brambilla, Davide Ripamonti, and Andrea Vaccarella  |
|                                       | Acerbis, Aldo Bongio, Marco Brambilla, and Stefano Butti  |
| 16:00 - 16:15<br>16:15 - 16:30        | Challenges in Android Wear Application Development. <i>Jukka Ahola</i><br>Model-Driven Development Based on OMG's IFML with WebRatio Web and Mobile Platform. <i>Roberto</i>  |
|                                       | Industry (Chair: Marco Brambilla)   |
| 10.00 (7.00                           | (Van Oldenbarnevelt Room)   |
| 17:15 – 17:30                         | Curtains Up! Lights, Camera, Action! Documenting the Creation of Theater and Opera Productions with<br>Linked Data and Web Technologies. <i>Thomas Steiner, Rémi Ronfard, Pierre-Antoine Champin, Benoît</i><br><i>Encelle, and Yannick Prié</i> [position paper] |
| 17:00 – 17:15                         | Adaptive Faceted Search for Product Comparison on the Web of Data. <i>Alex Stolz and Martin Hepp</i> [position paper]   |
| 16:45 - 17:00                         | Generating the Semantic Snapshot of Newscasts Using Entity Expansion. <i>José Luis Redondo-García, Giuseppe Rizzo, Lilia Pérez Romero, Michiel Hildebrand, and Raphaël Troncy</i> [position paper]  |
|                                       | Ngonga Ngomo [position paper]   |
| 16:30 - 16:45                         | paper]<br>Using Caching for Local Link Discovery on Large Data Sets. <i>Mofeed Hassan, René Speck, and Axel-Cyrille</i>   |
| 16:00 - 16:30                         | YQL as a Platform for Linked-Data Wrapper Development. Jon Iturrioz, Iker Azpeitia, and Oscar Diaz [full  |
| 16:00 - 17:30                         | Technical Session IX: Linked Data Development and Exploitation (Chair: Philipp Cimiano)   |
| 15:30 - 16:00                         | Coffee Break  |
| 10100 10100                           | Barrenechea, Kenneth Anderson, Ahmet Aydin, Mazin Hakeem, and Sahar Jambi [full paper]<br>(Goudriaan Room I & II)   |
| 15:00 - 15:30                         | Firmenich, Sergio Firmenich, Gustavo Rossi, Marco Winckler, and Damiano Distante [full paper]<br>Getting the Query Right: User Interface Design of Analysis Platforms for Crisis Research. Mario  |
| 14:30 - 15:00                         | User Interface Adaptation Using Augmentation Techniques: Towards Negotiated Approach. Diego   |
| 14:00 - 14:30                         | Live, Personal Data Integration through UI-Oriented Computing. Florian Daniel [full paper]  |
| 14:00 - 15:30                         | Technical Session VIII: Web User Interfaces (Chair: Daniel Schwabe)   |
| 15:00 - 15:30                         | Approximate Continuous Query Answering over Streams and Dynamic Linked Data Sets. Soheila<br>Dehghanzadeh, Daniele Dell'Aglio, Shen Gao, Emanuele Della Valle, Alessandra Mileo, and Abraham<br>Bernstein [full paper]<br>(Van Oldenbarnevelt Room)               |
| 14:30 - 15:00                         | Keyword Pattern Graph Relaxation for Selective Result Space Expansion on Linked Data. Ananya Dass,<br>Cem Aksoy, Aggeliki Dimitriou, and Dimitri Theodoratos [full paper]   |
|                                       | Stadtmüller [full paper]  |
| <b>14:00 – 15:30</b><br>14:00 – 14:30 | <b>Technical Session VII: Linked Data Interfaces and Querying</b> ( <i>Chair: Martin Hepp</i> )<br>SUMMA: A Common API for Linked Data Entity Summaries. <i>Andreas Thalhammer and Steffen</i>  |
|                                       |   |

## 19:00 – 23:30 Social Event 3: Conference Dinner

The conference dinner will be at the Italian resturant O'Pazzo, Mariniersweg 90, 10 minutes' walk from the conference venue. Italian for crazy, O'Pazzo is a beautiful and very good restaurant in Rotterdam. When you are in this remarkable restaurant with its unique interior, very beautiful ceiling paintings, special octopus shaped mosaic oven, crystal chandeliers, tree made out of copper coins, unique toilets and modern, colorful art, you will think you are in one of the best Napolitan restaurants. The delicious food, friendly service, and pleasant atmosphere make O'Pazzo one of the hotspots of Rotterdam.

## Day 4 – Friday, June 26<sup>th</sup> 2015

**09:00 – 10:30 Keynote "News Understanding for Knowledge Graph Freshness"**, by **Enrique Alfonseca**, *Google Research, Switzerland (Chair: Philipp Cimiano)* 

This talk describes our past and current work on event understanding from news, including two different systems and architectures for learning paraphrases of event patterns that we use for news understanding and headline generation from news collections. From a web-scale corpus of English news, we mine syntactic patterns that a generative model generalizes into event descriptions. At inference time, we query the model with the patterns observed in an unseen news collection, identify the event that better captures the gist of the collection and automatically produce updates for the knowledge graph, and retrieve the most appropriate pattern to generate a headline. The talk will focus on the event understanding and information extraction sides of the system, lessons learned in the past year, and the main challenges we see moving forward.

(Van Oldenbarnevelt Room)

| 10:30 - 11:00        | Coffee Break   |
|----------------------|--|
| <b>11:00 – 12:00</b> | Technical Session X: Web Interaction and Collaboration (Chair: Cinzia Cappiello)   |
| 11:00 - 11:30        | Tilt-and-Tap: Framework to Support Motion-Based Web Interaction Techniques. <i>Linda Di Geronimo,</i><br><i>Ersan Aras, and Moira Norrie</i> [full paper]                    |
| 11:30 - 12:00        | Harnessing WebGI and WebSockets for a Web-Based Collaborative Graph Exploration Tool. <i>Björn</i><br>Zimmer and Andreas Kerren [full paper]                                 |
|                      | (Van Oldenbarnevelt Room)  |
| 11:00 - 12:15        | Technical Session XI: Mobile Web Applications (Chair: In-Young Ko)   |
| 11:00 - 11:30        | Mobile-IDM: A Design Method for Modeling the New Interaction Style of Mobile. <i>Alessandro Fiore,</i><br>Giovanni Coppola, Luca Mainetti, and Andrea Pandurino [full paper] |
| 11:30 - 12:00        | Profiling User Activities with Minimal Traffic Traces. <i>Tiep Mai, Deepak Ajwani, and Alessandra Sala</i> [full<br>paper]   |
| 12:00 - 12:15        | Towards Liquid Web Applications. Tommi Mikkonnen, Kari Systa, and Cesare Pautasso [position paper]   |
|                      | (Goudriaan Room I & II)  |
|                      |  |

#### 12:15 – 12:30 Closing Session: Wrap-up and Advertisement ICWE 2016!

(Van Oldenbarnevelt Room)

12:30 – 14:00 Lunch

#### 14:45 – 19:00 Social Event 4: Boat Trip

We embark at the Boompjeskade 123, 20 minutes' walk from the conference venue, and will return here as well. We will sail on the passenger ship Nehalennia from Rotterdam to Kinderdijk. After about one hour, we moor at Kinderdijk, known for its 19 mills which have been proclaimed a UNESCO World Cultural Monument. Here, we will have about one and a half hours to, on your own, visit the area and enjoy the beautiful nature. On the return voyage to Rotterdam, you can enjoy the breathtaking skyline of Rotterdam. We will return to the same place we started cruising from.

### Workshops

#### First Workshop on PErvasive WEb Technologies, trends and challenges (PEWET 2015)

#### (Tuesday, June 23<sup>rd</sup> 9:00 – 12:30)

The aim of this workshop is to encourage multidisciplinary discussions on Pervasive Web Technologies theories, methods and experiences. To achieve this goal, we are inviting researchers to present their findings and new ideas, and practitioners to demonstrate examples from which we can learn. Researchers are increasingly interested in addressing a wide range of Pervasive Web Technologies challenges residing in these network systems, including the creation of new analysis models, the monitoring of emerging trends, the study of effects of Pervasive Web Technologies, etc. Those issues have important implications for new strategies of Pervasive Web Technologies management, innovation support, and so on.

Workshop organizers: Fernando Ferri, Patrizia Grifoni, Alessia D'Andrea, and Tiziana Guzzo

#### First International Workshop on Natural Language Processing for Informal Text (NLPIT 2015)

A large portion of language used on textual User Generated Contents (UGC) is informal. Informal text is the style of writing that disregards language grammars and uses a mixture of abbreviations and context dependent terms. The lack of enough context, the seldom entities involved, and the noisy sparse contents of users' contributions add challenges to NLP tasks. The aim of this workshop is to bring the attention of researchers to the opportunities and challenges involved in informal text processing. We are interested in discussing informal text modeling, normalization, mining, and understanding in addition to applications in which UGC is involved.

Workshop organizers: Mena B. Habib, Florian Kunneman, and Maurice van Keulen

#### ICWE 2015 Rapid Mashup Challenge

The ICWE 2015 Rapid Mashup Challenge launches a competition between mashup approaches/tools with special attention to their expressiveness and speed. We invite developers and researchers working on mashups, mashup tools, and assisting technologies to compete in the creation of the most interesting and/or complex mashup they can develop within a given time boundary, using a given set of source components. The goal of the Challenge is to allow everybody working on mashups and composite Web applications to showcase their ideas and solutions and to establish an event that is both challenging and fun.

Challenge organizers: Florian Daniel and Cesare Pautasso

#### First International Workshop in Mining the Social Web (SoWeMine 2015)

This workshop aims to study (and even go beyond) the state-of-the-art on social Web mining, a field that merges the topics of social network applications and Web mining. We aim to create a forum for professionals and researchers in the fields of personalization, search, text mining, etc., to discuss the application of their techniques and methodologies in this new and very promising research area. The workshop will particularly try to encourage the discussion on new emergent issues related to current trends derived from the creation and use of modern Web applications. Workshop organizers: Spiros Sirmakessis, Maria Rigou, and Evanthia Faliagka

(Leeuwen Room II)

## Tutorials .....

#### Enabling the Web of (Linked Open) Data Web

In this tutorial, we will take a look at the Web of Data (LOD project) via the lenses of "emergent semantics", which is guintessential for a much sought after semantic interoperability in dynamic environments, as well as self-organisation, which is an essential property of emergent semantic systems. The tutorial will stretch over the following two main topics: (1) Principles of emergent semantics, e.g., semantic handshaking protocol, evolution from local interactions and agreements towards global ones, and semantic self-organisation, with emphasis on examples found in science and nature, e.g., magnetisation in Physics, or examples

### (Tuesday, June 23<sup>rd</sup> 14:00 – 17:30)

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### (Tuesday, June 23<sup>rd</sup> 9:00 – 12:30)

(Goudriaan Room I)

### (Tuesday, June 23<sup>rd</sup> 9:00 – 12:30)

(Goudriaan Room I)

(Leeuwen Room II)

from biology and chemistry including the stripped patterns in Zebras, Fish, and the ocular dominance columns of the brain (these patterns are produced due to the individual responses of the cells to local conditions and the response of the neighbouring cells), and (2) Principles of pattern search based information retrieval with the focus on how these apply to the highly dynamic environment of the Web of (Linked Open) Data for the sake of data reusability and interoperability. Particular emphasis will be given on patterns among high-level features in order to bridge the semantic gap in search. *Presenter: Epaminondas Kapetanios* 

(Penn Room I)

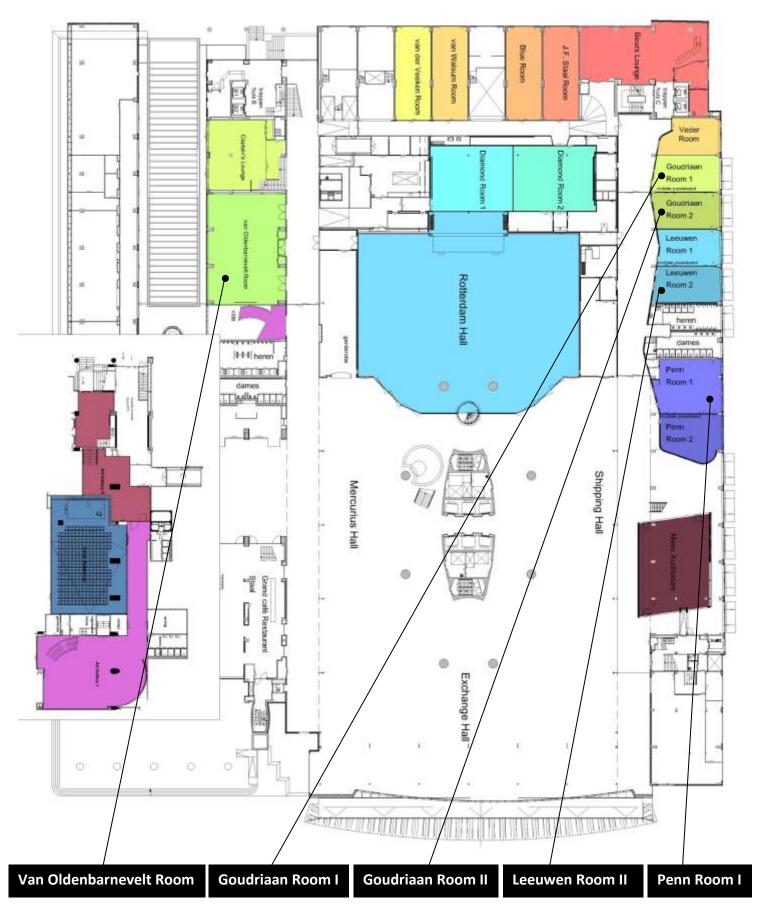
#### The Web of Data for E-Commerce: Schema.org and GoodRelations for Researchers and Practitioners

#### (Tuesday, June 23<sup>rd</sup> 14:00 – 17:30)

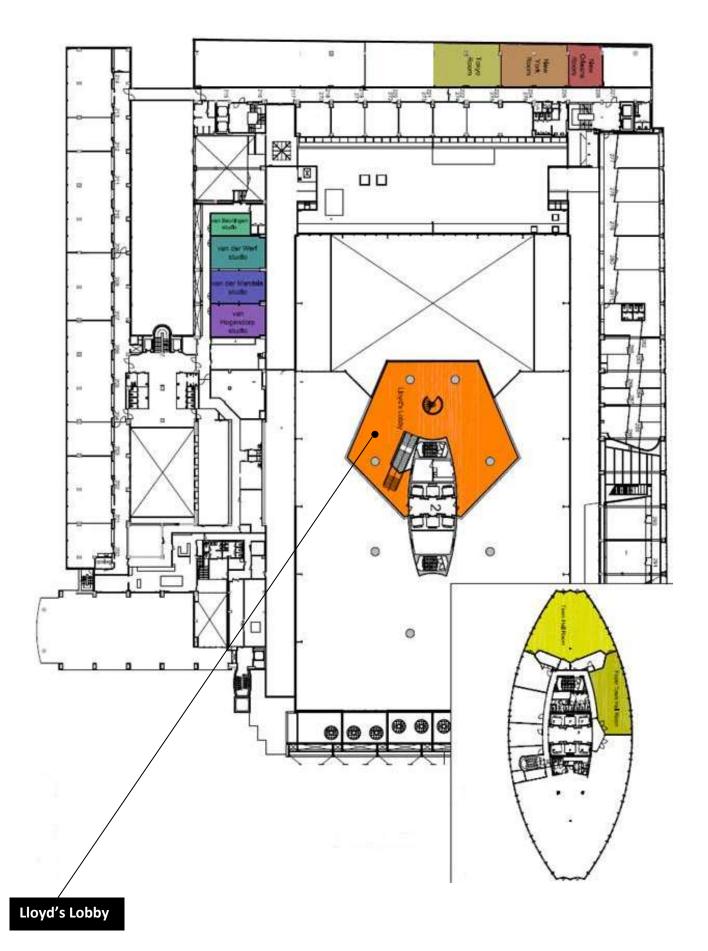
Schema.org is one of the main drivers for the adoption of needs. GoodRelations is a well-established conceptual model for representing e-commerce information, one of the few widely used OWL DL ontologies, and since 2012 the official e-commerce model of schema.org. In this tutorial, we will (1) give a comprehensive overview and hands-on training on the advanced conceptual structures of schema.org for e-commerce, including patterns for ownership and demand, (2) present the full tool chain for producing and consuming respective data, (3) explain the long-term vision of Linked Open Commerce, and (4) discuss advanced topics, like access control, identity and authentication (e.g., with WebID); micropayment services, and data management issues from the publisher and consumer perspective. We will also cover research opportunities resulting from the growing adoption and the respective amount of data in RDFa, Microdata, and JSON-LD syntaxes.

Presenter: Martin Hepp

(Penn Room I)







## Second Floor Conference Venue

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