Foreword

Welcome to the companion to the proceedings of OpenSym 2015, the 11th international symposium on open collaboration!

The companion comprises three main categories of contributions to the conference:

- Abstracts from the **doctoral symposium**
- **Industry and community contributions** (experience reports, workshop summaries, tutorials summaries, posters, demos)
- Abstracts or papers from the **keynotes and invited talks**

This year’s four keynotes and invited talks were:

- **Richard P. Gabriel** on Artificial Sentiment: Using Machines to Manage Public Sentiment on Social Media
- **Robert J. Glushko** on Collaborative Authoring, Evolution, and Personalization for a “Transdisciplinary” Textbook
- **Peter Norvig** on Applying Machine Learning to Programs
- **Anthony I. Wasserman** on Barriers and Pathways to Successful Collaboration

We would like to thank the speakers for their contribution to the success of OpenSym!
We would also like to thank our financial sponsors, the **Wikimedia Foundation** and **Google**, our in-kind sponsor for the doctoral symposium, **University of California Berkeley**, our ACM in-cooperation partners **SIGWEB** and **SIGSOFT**, and the fiscal sponsor of OpenSym, **The John Ernest Foundation**. Without their support and sponsorship, OpenSym 2015 would not have been possible!

We hope that you will enjoy the work presented here and that it provides you with a glimpse of the diversity and energy of the actual event!

For the OpenSym 2015 conference committee

Dirk Riehle  
General Chair, OpenSym 2015  
Friedrich-Alexander University Erlangen-Nürnberg
The 11th International Symposium on Open Collaboration

Table of Contents

Doctoral Symposium

**Collaborative Systems with Applications for Social Good**
Rakshit Agrawal (University of California, Santa Cruz)

**Volunteer Management in Open Source Communities**
Ann Barcomb (Friedrich-Alexander-Universität Erlangen-Nürnberg)

**On the role of FOSS business models and participation architectures in supporting open innovation**
Michelle Purcell (Drexel University)

**The Evolution of A Digital Ecosystem**
Sungyong Um (Temple University)

**Large Scale, Open Cognitive Collaboration of Distributed Crowds**
Bei Yan (University of Southern California)

Industry and Community Track

**Collaborative OER Course Development – Remix and Reuse Approach**
Sheng Hung Chung (WOU)
Social Collaboration Metrics
Manfred Langen (Siemens AG)

Marc Joffe (Public Sector Credit Solutions), Vadim Ivlev (Self Employed)

Keynotes and Invited Talks / Papers

Artificial Sentiment: using machines to manage public sentiment on social media
Richard Gabriel (IBM Watson Group)

Collaborative Authoring, Evolution, and Personalization for a "Transdisciplinary" Textbook
Robert Glushko (UC Berkeley)

Applying Machine Learning to Programs
Peter Norvig (Google)

Barriers and Pathways to Successful Collaboration
Anthony Wasserman (CMU Silicon Valley)
Conference Organization

Overall Organization
Dirk Riehle, Friedrich-Alexander University Erlangen-Nürnberg

Free/Libre/Open Source Software Research Track Chairs
Carlos Jensen, Oregon State University
Gregorio Robles, Universidad Rey Juan Carlos

IT-Driven Open Innovation Research Track Chairs
Ann Majchrzak, University of Southern California
Arvind Malhotra, University of North Carolina at Chapel Hill

Open Data Research Track Chair
Carl Lagoze, University of Michigan
Wikipedia Research Track Chairs
Claudia Müller-Birn, Freie Universität Berlin
Aaron Shaw, Northwestern University

Wikis and Open Collaboration Research Track Chair
Kevin Crowston, Syracuse University

Doctoral Symposium Chair
Andreea Gorbatai, University of California at Berkeley

Industry and Community Track Chairs
Simon Dückert, Cogneon
Dirk Riehle, Friedrich-Alexander University Erlangen-Nürnberg

Organizational Support
Ann Barcomb, Friedrich-Alexander University Erlangen-Nürnberg
Fariba Bensing, Friedrich-Alexander University Erlangen-Nürnberg
Hannes Dohrn, Friedrich-Alexander University Erlangen-Nürnberg
Doctoral Symposium Committee

Chairs
Andreea Gorbatai, University of California at Berkeley

Members
Ademar Aguiar, Universidade do Porto
Aaron Shaw, Northwestern University
Claudia Müller-Birn, Free University of Berlin
Gueorgi Kossinets, Google
The 11th International Symposium on Open Collaboration

Industry and Community Track Committee

Chairs
Simon Dückert, Cogneon
Dirk Riehle, Friedrich-Alexander University Erlangen-Nürnberg
The 11th International Symposium on Open Collaboration

Platinum Sponsor

[Platinum Sponsor Logo]

Gold Sponsor

[Gold Sponsor Logo]

In-kind Sponsor

[In-kind Sponsor Logo]

Fiscal Sponsor

[Fiscal Sponsor Logo]

ACM In-Cooperation

[ACM In-Cooperation Logos]