Foreword

We would like to take this opportunity to welcome you to the *First International Workshop* on Data Analysis Patterns in Software Engineering (DAPSE 2013).

Data scientists in software engineering seek insight in data collected from software projects to improve software development. The demand for data scientists with domain knowledge in software development is growing rapidly and there is already a shortage of such data scientists. Data science is a skilled art with a steep learning curve. To shorten that learning curve, this workshop collects best practices in form of data analysis patterns, that is, analyses of data that leads to meaningful conclusions and can be reused for comparable data. The goal is a catalog of such patterns that will help both experienced and emerging data scientists to better communicate about data analysis.

For the workshop, we offered two options for submitting a pattern:

- Archival Papers that are included in this proceedings. This year we had a total of seventeen, archival submissions, of which we accepted 13.
- Non-Archival Papers that are not included in the proceedings and are published on the workshop web-pages only. We allowed submission of non-archival papers until a few weeks before the conference.

Both archival and non-archival papers were reviewed by a program committee and accepted based on the clarity of the description, the relevance to analysis in the software engineering domain, and how broadly their proposed pattern might be applicable. Prior application of the pattern by the authors was not a requirement. This workshop is more interested in the mechanics and choice of the data analysis than the impact of published results. The workshop organizers were allowed to contribute non-archival papers in order to guarantee a diverse set of patterns at the workshop.

The selection of patterns is indicative of the momentum which is behind the data analysis of software engineering data. We hope that the discussion oriented format of DAPSE 2013 will encourage both engineers and researchers to participate in this embryonic community. Your attendance at this workshop will shape the future research agenda, and we hope to see you all, together with any newcomers, in the workshops still to come.

We are deeply indebted to the Program Committee members and authors of the submitted papers for their help and enthusiasm in putting together this program. We would like to thank the ICSE Workshop Chairs, Margaret Burnett and Holger Giese, and the rest of the ICSE organizing committee for their help in putting together the DAPSE workshop. Lastly we would like to thank you all for your participation in DAPSE 2013. We hope that you all find the workshop stimulating and enjoyable. *Go mine some data!*

Christian Bird, Tim Menzies, and Thomas Zimmermann Workshop organisers and co-chairs

http://research.microsoft.com/en-us/events/dapse2013/

Workshop Co-Chairs

Christian Bird, Microsoft Research, USA Tim Menzies, West Virginia University, USA Thomas Zimmermann, Microsoft Research, USA

Program Committee

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Additional Reviewers

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