



Proceedings of the Second Workshop  
on  
Data Science for Social Good

associated to ECML PKDD 2017

Skopje (Macedonia), September 18th, 2017

<https://sites.google.com/site/ecmlpkddsogood2017/>

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# Preface

These are the proceedings of SoGood 2017, the Second Workshop on Data Science for Social Good. The workshop was held in conjunction with the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD 2017) and took place in Skopje, Macedonia, on September 18th, 2017.

Data science has a great potential for contributing to the social, common and public good. Emerging applications are already helping in addressing poverty and serving people at the bottom of the economic pyramid, aiding people with special needs, helping international cooperation in public safety, disaster relief and transportation, improving healthcare and detecting disease outbreaks. In regular conferences and journals, papers on these topics are often scattered among sessions with names that hide their common nature (such as "Social networks", "Predictive models" or even under the catch-all term "Applications"). Additionally, such forums tend to have a strong bias for papers that are novel in the strictly technical sense (new algorithms, new types of data analysis, new technologies) rather than novel in terms of social impact of the application.

The aim of this workshop was to attract work related to the use of data science for social good; bring together researchers, students and practitioners to share their experience and foster discussion about the possible applications and challenges, and to continue building a research community in this area. The call for papers included the following non-exclusive list of application domains:

- Public safety and disaster relief
- Access to food, water and utilities
- Efficiency and sustainability
- Government transparency
- Data journalism
- Economic, social and personal development
- Transportation

- Energy
- Smart city services
- Education
- Social services, unemployment and homelessness
- Healthcare
- Cybersecurity (including cyberbullying, propaganda and radicalization)
- In general, topics related to the UN Development Goals at <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

The workshop papers were selected through a peer-reviewed process in which each submitted paper was assigned to three members of the Program Committee. The novelty of the application and its social impact were chosen as the main selection criteria. Four papers were accepted for oral presentation and were also presented as posters during the lunch break.

The program comprised of:

- An invited talk by Dr Alexandra Olteanu, a Social Good Fellow at the IBM T.J. Watson Research Center on using social media to understand collective and personal events
- Two sessions with the oral presentation of the accepted papers
- Discussion focusing on common methodological core for the various applications of data science for social good, European collaboration and infrastructure, future directions and new emerging domains
- A poster session of the accepted papers during the lunch break where the audience and authors could engage in more detailed discussion

More information about the workshop, including the presentation slides, can be found on the workshop website:

<https://sites.google.com/site/ecmlpkdd2017sogood/>

We would like to thank Dr. Olteanu for her excellent talk, the Program Committee members for their detailed and constructive comments to the authors, the authors for their well-prepared papers, presentations and posters, and the audience for its engagement and participation, especially during the discussions – thank you for making this workshop a successful event.

October 6, 2017  
Barcelona, Sydney, Mainz

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## Program Committee

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