

Preface

In urban spaces, there is a huge amount of heterogeneous data being generated by a diversity of sources, such as sensors, devices, vehicles, smart buildings, and others. Although they are used to monitor basic services, they can provide significant information about human interactions and populational dynamics. Moreover, people constantly interact with each other through social media services, and much of interpersonal interaction is nowadays mediated by information technology. Citizens consume and share information about their cities - such as problems, events, ideas, suggestions, criticisms, and demands – acting as ‘human sensors’, forming opinions and participating in the city evolution.

These data explosion has resulted in the emerging topic of “Big Social Data”. Broadly speaking, Big Social Data refers to large data volumes that relate to people interactions or describe their behaviors, needs, and patterns. The volume, the production and spreading velocity, and the variety (providing semantic richness) of such data open enormous possibilities for utilizing and analyzing them for the understanding of urban spaces, tackling the major issues that these localities face, and helping in the creation of smarter and sustainable cities.

Urban computing is a process of acquisition, treatment, and analysis of big and heterogeneous data to better understand how city ecosystems work. This understanding can remedy a wide range of issues affecting the everyday lives of citizens and the long-term health and efficiency of cities. The use of Big Social Data in urban computing helps us to understand the nature of urban phenomena and even predict the future of cities, creating solution to reduce costs and optimize resource consumption, improve population mobility, provide higher human life quality, enhance decision making in emergency scenarios, and engage more effectively with citizens for a continuous city planning.

Urban computing is an interdisciplinary field and this workshop aims to connect works about the use and treatment of Big Social Data in multidisciplinary research spanning across computer science - such as engineering, environmental studies, health, urban planning and social sciences - for urban sustainability, transparency, livability, social inclusion, place-making, accessibility, and resilience.

We present the Proceedings of the Poster Track of the Workshop on Big Social Data and Urban Computing (Bidu 2018). We had 16 papers presented in this category. The workshop was held in conjunction with VLDB 2018 in Rio de Janeiro.

We would like to thank the authors of all submitted papers. Their innovation and creativity resulted in an interesting technical program. We are highly indebted to the program committee members, whose reviewing efforts ensured in selecting a competitive set of papers. Finally, we would like to express our sincere gratitude to the invited speakers.

August, 28th 2018

Jonice Oliveira, Universidade Federal do Rio de Janeiro, Brazil
Claudio Miceli de Farias, Universidade Federal do Rio de Janeiro, Brazil
Giancarlo Fortino, Università della Calabria, Italy

Esther Paccitti, University of Montpellier, France

Program Chairs

- Prof. Jonice Oliveira (Universidade Federal do Rio de Janeiro, Brazil) - jonice@dcc.ufrj.br
- Prof. Claudio Miceli (Universidade Federal do Rio de Janeiro, Brazil) - claudiofarias@nce.ufrj.br
- Prof. Esther Pacitti (Inria/Cnrs, University of Montpellier, France) - Esther.Pacitti@lirmm.fr
- Prof. Giancarlo Fortino (Università della Calabria, Italy) - giancarlo.fortino@unical.it

Program Committee

- Adriano Pereira - Universidade Federal de Minas Gerais, Brazil
- Ahmed Elmisery - Universidad Técnica Federico Santa María, Chile
- Antonio Liota - Technische Universiteit Eindhoven, Netherlands
- Arthur Zivianni - Laboratório Nacional de Computação Científica, Brazil
- Carlos Sarraute - Instituto Tecnológico de Buenos Aires, Argentina
- Chiara Renso - ISTI Institute of CNR, Italy
- Chico Camargo - University of Oxford, UK
- Claudio Miceli - Universidade Federal do Rio de Janeiro, Brazil
- Eduardo Ogasawara - Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, Brazil
- Elisabeth Lex - Graz University of Technology, Know-Center, Austria
- Esther Pacitti - Inria/Cnrs, University of Montpellier, France
- Flavia Bernardini, Universidade Federal Fluminense, Brazil
- Flávia Coimbra Delicato - Universidade Federal do Rio de Janeiro, Brazil
- Giancarlo Fortino - Università della Calabria, Italy
- Giseli Rabello Lopes - Universidade Federal do Rio de Janeiro, Brazil
- Giuseppe Di Fatta - University of Reading, UK
- Graziela Figueredo - University of Nottingham, UK
- Haibin Zhu - Nipissing University, Canada
- Igor Santos - Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, Brazil
- Javier Baliosian - Universidad de la República, Uruguay
- Jonice Oliveira - Universidade Federal do Rio de Janeiro, Brazil
- José Viterbo - Universidade Federal Fluminense, Brazil
- Juan Antonio Lossio Ventura - University of Florida, USA
- Karima Boudaoud - Ecole Polytechnique de l'Université de Nice Sophia Antipolis, France
- Lívia Ruback - Universidade Federal do Rio de Janeiro, Brazil
- Manel Zarrouk - Insight Centre, NUIG, Ireland
- Marcelo Mendoza - Universidad Técnica Federico Santa María, Chile
- Marcos Oliveira - GESIS - Leibniz Institute for the Social Sciences, Germany
- Maria Luiza Campos - Universidade Federal do Rio de Janeiro, Brazil

- Mirella M. Moro - Universidade Federal de Minas Gerais, Brazil
- Nazim Agoulmine - Université d'Évry Val d'Essonne, France
- Paulo de Figueiredo Pires - Universidade Federal do Rio de Janeiro, Brazil
- Reinaldo Bezerra Braga - Instituto Federal do Ceará, Brazil
- Reyes Juarez Ramirez - Universidad Autonoma da Baja California, Mexico
- Rodrigo de Souza Couto - Universidade Estadual do Rio de Janeiro, Brazil
- Rodrigo Santos - Universidade Federal do Estado do Rio de Janeiro, Brazil
- Sérgio Lifschitz - PUC-Rio, Brazil
- Sergio Ochoa - Universidad de Chile, Chile
- Soon Ae Chun - City University of New York, USA
- Taniro Rodrigues - Universidade Federal do Rio Grande do Norte, Brazil
- Thiago H Silva - Tecnológica Federal do Paraná, Brazil
- Thiago Moreira - Université d'Évry Val d'Essonne, France
- Wei Li - University of Sydney, Australia

