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Social Computing, Behavioral-Cultural Modeling and Prediction

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Preface

This proceedings volume contains the accepted papers and posters from the 2013 International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction. This was the sixth year of the SBP conference, and the third since it merged with the International Conference on Computational Cultural Dynamics.

In 2013 the SBP conference continued to grow. We received a strong set of 137 submissions, greatly exceeding the previous high of 88. SBP continues to be a selective single-track conference. Thirty-three submissions were accepted as full papers, for a 24% paper acceptance rate. We also accepted 27 posters, more than we had previously, for an overall 42% acceptance rate. All papers and posters presented at the conference are included in this proceedings volume, which are distributed to attendees and made available electronically as well as in print as part of Springer's *Lecture Notes in Computer Science* series.

This conference is strongly committed to multidisciplinarity, consistent with recent trends in computational social science and related fields. Authors were asked to indicate from a checklist which topics fitted the papers they were submitting. So many of the papers covered multiple categories that dividing this proceedings volume into topical sections presented a real challenge for the Program Committee. Of course, as a multidisciplinary conference, this is exactly the sort of problem we are glad to have. The topic areas that formed the core of past SBP conferences are all well represented: behavioral science, health sciences, military science and information science. There are also many papers that provide methodological innovation as well as new domain-specific findings.

There are a number of events that took place at the conference that are not well represented in the proceedings, but added greatly to the intellectual and collegial value of the experience for participants. The first day of the conference offered four free tutorials, from Marta C. Gonzalez (A Review of Human Mobility Models Based on Digital Traces of Human Activity), David Sallach (Categorial Analysis of Social Processes), Joey Harrison and Claudio Cioffi-Revilla (Building Agent-Based Models with the MASON Toolkit), and GeorgiyBobashev (Social Simulation: Introduction to Agent-Based Modeling). One of our excellent keynote speakers anchored each day's program: Myron Gutmann from the National Science Foundation and University of Michigan, Michele Gelfand from the University of Maryland, and BernardoHuberman from Hewlett-Packard Laboratories.

Nitin Agarwal and Wen Dong managed the second SBP Data Analysis Challenge Problem, designed around a rich and unique "reality mining" dataset generously provided and supported by the MIT Human Dynamics Laboratory. (These data continue to be available to the research community at reality-commons.media.mit.edu.)

Unique SBP traditions also continued: The "Cross-Fertilization Round Table" event created opportunities for interaction between technical specialists and domain experts, and a Q&A panel was held over lunch with program managers from a number of federal agencies. More information on all program activities is available on the conference website at SBP2013.org.

Activities such as SBP only succeed with assistance from many contributors. The conference itself was held during April 2-5 in downtown Washington, DC, at the University of California's DC Center on Rhode Island Avenue; we are grateful for their hospitality and many forms of logistical support. The Organizing Committee met early and often this year, lining up keynote speakers, working to publicize the conference, and making many decisions about programming, direction, and finances. Program Committee Co-chairs Ariel M. Greenberg and William G. Kennedy should be singled out for special recognition. They ably managed the submission, review, and proceedings production process, keeping it on an aggressive schedule without losing sight of the larger goals of promoting intellectual exploration and broad participation. Evaluating the large number of submissions could not have been accomplished without our volunteer reviewers, listed under the Technical Program Committee. Last but not least, we sincerely appreciate the support from the following federal agencies: Air Force Research Laboratory (AFRL), Army Research Office (ARO), National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health (NIH), the National Science Foundation (NSF), and the Office of Naval Research (ONR). We also would like to thank Alfred Hofmann from Springer. We thank all for their kind help, dedication, and support in making SBP13 possible.

January 2013

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Keisuke Nakao
Christian Lebiere
Patrick Finley
Andrew Collins
Victor Asal
David Chin
Yu-Han Chang
Haiqin Wang
Terresa Jackson
Manas Hardas
Bethany Deeds
Jang Hyun Kim
S.S. Ravi
Myriam Abramson
Daniel Zeng
Robert Hubal
Edward Ip
Hasan Davulcu
Soyeon Han
Sujogya Banerjee
Wai-Tat Fu
Elyse Glina
John Salerno
Masahiro Kimura
Laurence T. Yang
Kouzou Ohara
Yanping Zhao
Zhijian Wang
Koji Eguchi
Alvin Chin
Juan Mancilla
Zeki Erdem
David L. Sallach
Mathew McCubbins
Byeong-Ho Kang
Rajiv Maheswaran
Fatih Özgül
Radoslaw Nielek
Hiroshi Motota
Joseph Lyons
Lashon Booker
Patrick O'Neil
Xintao Wu
Thomas Moore
Wen Pu
Kayo Fujimoto
Saulius Masteika
Gaurav Tuli
Alexander Outkin
Christopher Yang
William Ferng
Liang Gou
Alin Coman
Geoffrey Barbier
Kazumi Saito
Shanchieh Yang
Halimahtun Khalid
Tisha Wiley
Antonio Sanfilippo
Achla Marathe
Shibin Parameswaran
Kalin Agrawal
Jonathon Kopecky
Sedat Gokalp
Craig Vineyard
Anthony Ford
Hazhir Rahmandad
Rik Warren
Lei Yu

Amitava Das
Aleksander Wawer
Madhav Marathe
Armando Geller
Walter Hill
Stephen Verzi
Seyed Mussavi Rizi
Maciej Latek
Richard Fedors
Elizabeth Bowman
John Lavery
Laurie Fenstermacher
Chandler Armstrong
Jeffrey Ellen
Vincen Silenzio
Michael Lewis
Emrah Onal
Shusaku Tsumoto
Kaushik Sarkar
Bart Paulhamus
Michael Mitchell
Corey Lofdahl
Mi Zhang
Ma Regina Justina E. Estuar
Xiaofeng Wang
Xueqi Cheng
Alin Coman
Ariel M. Greenberg
Bill Kennedy
Nathan Bos

Table of Contents

Behavioral Science

Health Sciences

Information Science

Methodology

Military Science