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Samir Chatterjee · Kaushik Dutta Rangaraja P. Sundarraj (Eds.)

# Designing for a Digital and Globalized World

13th International Conference, DESRIST 2018 Chennai, India, June 3–6, 2018 Proceedings



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## **Preface**

The interest in design science research in information systems continues to grow. The DESRIST conference series has played a pivotal role in building that interest and establishing a solid knowledge foundation for scholars and researchers. This volume contains full papers that were presented at DESRIST 2018 – the 13th International Conference on Design Science Research in Information Systems and Technology – held during June 3–6, 2018, at Chennai, India.

Over the years, DESRIST has brought together researchers and practitioners engaged in all aspects of design science research. As in previous years, scholars and design practitioners from various areas, such as information systems, business and operations research, computer science, and interaction designers, came together to discuss challenges and opportunities ahead. This year's conference was somewhat unique in that it was the first time that DESRIST was held in Asia, particularly in India, one of the rapidly growing economies of the world. It built on the foundation of 12 prior highly successful international conferences held in Claremont, Pasadena, Atlanta, Philadelphia, St. Gallen, Milwaukee, Las Vegas, Helsinki, Miami, Dublin, St. John, and Karlsrhue.

The theme for DESRIST 2018 was "Designing for a Digital and Globalized World." This year's conference acted as a major forum for the presentation of innovative information system ideas, approaches, developments, and research projects in the area of DSR theory and applications. It also served to facilitate the exchange of ideas between researchers and industry professionals. The latest issues and advancements in the area of IT and its applications that affect everyone around the globe were covered during the conference. We expect that the conference and its publications in this volume will be a trigger for further related research and technology improvements in information systems. DESRIST 2018 attracted researchers from Asia to submit their best work and present it at the conference, thereby making it a more globally inclusive community. The conference was organized around several main themes and tracks: DSR in Health Care, DSR in Cyber Security, DSR in Service Science, DSR for HCI, DSR in Data Science and Business Analytics, DSR Foundations, DSR and Emerging Ideas, DSR in Domain-Specific Applications, and DSR for ICT in Developing Countries. Each theme was headed by distinguished track chairs who managed the papers that were submitted in their respective tracks. In total, we received 96 submissions (61 full papers, 11 product and prototypes, and 24 research-in-progress papers). Each research paper was reviewed by a minimum of two referees. This Springer volume contains 24 full research papers with an acceptance rate of 39%. Research-in-progress papers and few papers designated as posters were made available digitally to attendees.

We would like to thank all the authors who submitted papers to the DESRIST 2018 conference. We hope the readers will find the papers as interesting and informative as we did. We would also like to thank all the track chairs, Program Committee members,

#### VI Preface

and reviewers for their invaluable service. We would also like to thank the other members of the Organizing Committee, as well as the volunteers, whose dedication and effort helped bring about a successful DESRIST 2018 conference. Our special thanks go to Dr. Nargis Pervin for managing the submission system and papers for publication and to Anik Mukherjee for his tireless service as web master and with local arrangements. We would also like to thank the Indian Institute of Technology, Chennai for giving us access to their facilities and thank, all the sponsors for their support. We believe the papers in these proceedings provide many interesting and valuable insights into theory and practice of DSR. They open up new and exciting possibilities for future research in the discipline.

May 2018

Samir Chatterjee Kaushik Dutta Rangaraja P. Sundraraj

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# **Contents**

# **HCI** and **Design**

Design Principles for Room-Scale Virtual Reality: A Design Experiment in Three Dimensions	3
Designing Conversational Agents for Energy Feedback	18
ServiceDesignKIT: A Web Platform of Digital Service Design Techniques Xuanhui Liu, Erwin Tak-Ming Leung, Peyman Toreini, and Alexander Maedche	34
Design Foundations	
Making Sense of Design Science in Information Systems Research: Insights from a Systematic Literature Review	51
Design Science in the Field: Practice Design Research	67
Utilizing, Producing, and Contributing Design Knowledge in DSR Projects Andreas Drechsler and Alan R. Hevner	82
Design in Healthcare	
Designing "Living" Evidence Networks for Health Optimisation:  Knowledge Extraction of Patient-Relevant Outcomes in Mental Disorders  Hoang D. Nguyen, Øystein Eiring, and Danny Chiang Choon Poo	101
Assessing Strategic Readiness for Healthcare Analytics:  System and Design Theory Implications	116
Easy Nutrition: A Customized Dietary App to Highlight the Food Nutritional Value	132

Taxonomy Development for Virtual Reality (VR) Technologies in Healthcare Sector	146
Maram Almufareh, Duaa Abaoud, and Md Moniruzzaman	
Dengue Prediction Using Hierarchical Clustering Methods	157
Collaborative Literature Search System: An Intelligence Amplification Method for Systematic Literature Search	169
Advances in Data Science and Analytics	
ALDA: An Aggregated LDA for Polarity Enhanced Aspect Identification Technique in Mobile App Domain	187
Development of a Data-Driven Business Model Transformation Tool Dominik Augenstein, Christian Fleig, and Alexander Maedche	205
Towards Collaborative Data Analysis with Diverse Crowds – A Design Science Approach	218
ICT for Development	
An Argument for Post-Hoc Collective Intelligence	239
An Ontological Approach to Classifying Cybercrimes in an ICT4D Context Charlette Donalds and Kweku-Muata Osei-Bryson	253
Extending DSR with Sub Cycles to Develop a Digital Knowledge Ecosystem for Coordinating Agriculture Domain in Developing Countries  Tamara Ginige, Lasanthi De Silva, Anusha Walisadeera, and Athula Ginige	268
Designing Cybersecurity	
Strategic Planning for IS Security: Designing Objectives	285
A Prediction Model of Privacy Control for Online Social Networking Users Rohit Valecha, Rajarshi Chakraborty, H. Raghav Rao, and Shambhu Upadhyaya	300

Contents	XIII
A Knowledge Interface System for Information and Cyber Security Using Semantic Wiki	316
Design Applications	
Capturing User Generated Video Content in Online Social Networks Clinton Daniel, Matthew Mullarkey, and Alan R. Hevner	333
Software-Embedded Evaluation Support in Design Science Research  Jonas Sjöström, Leona Chandra Kruse, Amir Haj-Bolouri, and Per Flensburg	348
Towards a Collaborative, Interactive Web Services Composition Approach Based on an Intentional Group Recommender System	363
Author Index	379