DATA SCIENCE - EXTRACTING INSIGHTS
Open Journal

Review

Special Issue on Responsible Data Management and Data Science

Zi Huang[1]; Yanyan Shen[2]; Divesh Srivastava[3*]

[1]*University of Queensland, Brisbane, Australia*
[2]*Shanghai Jiao Tong University, Shanghai, China*
[3]*AT&T, Bedminster, USA*

[*]***Corresponding author***
Divesh Srivastava
AT&T, Bedminster, USA; E-mail: divesh@research.att.com

Article information
Received: February 28th, 2024; **Revised:** April 3rd, 2024; **Accepted:** April 26th, 2024; **Published:** May 28th, 2024

Cite this article
Huang Z, Shen Y, Srivastava D. Special issue on responsible data management and data science. 2024; 2(2). doi: https://doi.org/10.70705/ppp.dsei.2024.v02.i02.pp106

INTRODUCTION

We, the guest editors of the VLDB Journal special issue on Responsible Data Management and Data Science, are excited to present this special issue to the readership of the VLDB Journal. This special issue was conceived almost two years ago when it was becoming increasingly apparent to our community that while data management and data science technologies enable tremendous opportunities for individuals and organizations to make use of their data assets to create value, they also have the potential, if used without proper care, to have serious adverse consequences on these same individuals and organizations.

We solicited submissions on a wide range of topics in data management and data science relevant to the special issue and were pleased to receive a total of 30 submissions from around the world by the submission deadline in late-February 2021. To ensure a diverse and expert set of reviewers for these sub- missions, we requested senior authors of these submissions to also serve as reviewers for the special issue in addition to inviting a select set of experts on these topics from the com- munity as reviewers—fortunately, almost all our invitations were accepted! We decided early on that each submission would be accepted or rejected on its own merits, without a quota on the total number of accepted papers to the spe- cial issue. After the first round of reviews were in, only 15 (of the 30) submissions remained under consideration. These revised papers went through a second round of reviews, after which 6 submissions were accepted and another 8 were given the opportunity to revise their papers again to address remain- ing reviewer concerns. All these 8 submissions were accepted thereafter.

The set of 14 papers accepted to the special issue cover a wide range of topics, demonstrating the broad scope of responsible data management and data science. This includes

(a) foundational work on data management topics ranging from data integration and data quality to data privacy; (b) on data science topics ranging from machine learning pipelines to causal inference and robust machine learning; as well as

(c) application-inspired work on topics such as fraud detec- tion and recommender systems. We hope that the readers of this special issue are inspired by these papers and them- selves pursue research on these and other topics to ensure that all data management and data science research is eventually considered as responsible research by the community!

We thank the many authors who submitted their papers to the special issue and the many reviewers who carefully reviewed these papers to make sure that the special issue is indeed special!