Editorial: A Reformed Journal of Data Science for the Era of Data Science

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I have been pondering what I could do if I were the editor of the *Journal of Data Science* since the moment I was approached by the journal's management board in spring 2019. Established in 2003, the journal "publishes research works on a wide range of topics that involving understanding and making effective use of field data — i.e., all aspects of applied statistics", with a goal "to enable scientists to do their research on applied science and through effective use of data." This scope and aim defined by the founding editors remain golden in the era of data science. Thank Drs. Min-Te Chao and Ben-Chang Shia, the journal carries an invaluable name long before data science became all the rage in the media. While keeping true to the original aspiration, I plan to reform the journal with new ideas to better accomplish the mission.

As my term officially started on July 1, 2020, I started putting my reforming plan into action. The ideas are based on the three pillars of data science — computer science, statistics/mathematics, and domain knowledge — as formulated by Prof. Bin Yu in her 2014 IMS Presidential Address. In particular, I introduce the following new sections:

- Statistical data science: novel, application oriented statistical contributions to data science.
- Computing in data science: novel computational contributions to data science such as algorithms, software packages, and performance assessments.
- Data science in action: substantive contributions to data science in practice from various domain fields.
- Data science review: reviews and tutorials on the latest data science techniques for readers who want to get into a new field or pick up new skills.
- Data science education: contributions to the ever-evolving the curricula of data science and tools in teaching data science.

The journal will have a unique statistical flavor in the field of data science rooted from the history. We expand from our applied statistics base to the computing and domain aspects of data science without loosing our strength in statistics. All kinds of data are of interest, small or big, structured or unstructured, observed or missing. Any aspect of the life cycle (collecting, processing, analyzing, communicating, etc.) of data science projects from any field that involves understanding and making effective use of data is welcome.

Why publishing in *Journal of Data Science*? Here are five reasons, some of which have been with the journal all along.

1. No copyright transfer: The authors keep their copyrights.
2. Free access: The published papers are completely free to access from all over the world.
3. Wide dissemination:: The data (if not proprietary) and code for reproducibility, published in open repository or supplementary materials, facilitate widest dissemination.
4. Adaptive topics: Special issues are called on hot spots of data science research.
5. Fast review: The first technical response is targeted within 6 weeks.

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is a key feature of open data science. We are alert on special topics and welcome suggestions for special issues. Fast review relies on our energetic editorial board with passion in data science.

In the next few years, my goal is to further increase the visibility and impact of the journal, making it one of journals that come to mind when data scientists talk about data science journals. There is no doubt a long-term process towards that goal. We will make it step by step. The first issue under my editorship, the 2020 July issue (Vol. 18, Number 3), is a special issue on "Data Science in Action in Response to the Outbreak of COVID-19", thank Drs. Dean Follmann, Peter X. K. Song, and Hansheng Wang for joining me as co-guest-editors. The looks of the published articles are much different, thank Dr. Wenjie Wang for developing the new LATEX template. In the upcoming issues, example articles for the new sections will be published to attract more contributions alike to the journal. Challenges, scientific or logistic, are expected. With help from the editorial board and the supporting team of the School of Statistics, Renmin University of China, we will tackle them one by one on our way towards the goal.

Finally, I would like to express deep gratitude to the the management board of the journal for selecting me as the new editor of the *Journal of Data Science*. I am grateful to the founding editors for their vision and all the past editors for carrying the torch before it was passed into my hands. This is a good opportunity for me to contribute to shaping the field of data science through the platform provided by the journal. I look forward to a more exciting and more impactful *Journal of Data Science* playing an important role in the era of data science.