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Inaugural Editorial
Can We Achieve Our Mission: Fast, Accessible, Cutting-edge, and Top-quality?

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Abstract

We are pleased to launch the first issue of the New England Journal of Statistics in Data Science (NEJSDS). NEJSDS is the official journal of the New England Statistical Society (NESS) under the leadership of *Vice President for Journal and Publication* and sponsored by the College of Liberal Arts and Sciences, University of Connecticut. The aims of the journal are to serve as an interface between statistics and other disciplines in data science, to encourage researchers to exchange innovative ideas, and to promote data science methods to the general scientific community. The journal publishes high quality original research, novel applications, and timely review articles in all aspects of data science, including all areas of statistical methodology, methods of machine learning, and artificial intelligence, novel algorithms, computational methods, data management and manipulation, applications of data science methods, among others. We encourage authors to submit collaborative work driven by real life problems posed by researchers, administrators, educators, or other stakeholders, and which require original and innovative solutions from data scientists.

KEYWORDS AND PHRASES: Data Science, NESS, New Journal.

1. THE FACT

The journal aims to use a *F*ast and innovative review process, develop an *A*ccessible and open platform for communication, cover *C*utting-edge research topics, and provide *T*op-quality publications related to statistics and data science. It prioritizes speed, accessibility, relevance, and quality in its operations

- *F*ast: The NEJSDS reviews and publishes papers quickly, allowing authors to disseminate their research to the wider community in a timely manner.
- *A*ccessible: Papers are freely available to everyone. In addition, a companion webinar series is created and authors of selected feature papers will present the major findings to those in different geographic locations and from diverse backgrounds. Furthermore, authors have an access to participate the review process, and readers have access to comment on published papers.
- *C*utting-edge: The journal features the latest research and innovative ideas in the field, promoting the advancement of knowledge and encouraging new discoveries.
- *T*op-quality: The journal ensures articles are of high quality, through rigorous peer review processes and attention to detail in publication standards.

1.1 Journal Structure

The NEJSDS is currently a free open access journal. The post-acceptance publication process is handled by VTeX, which provides services that offer solutions for science publishing since 1991. All of accepted papers are automatically assigned a digital object identifier (DOI) number and posted on https://nejsds.nestat.org/journal/NEJSDS/to-appear soon after acceptance.

The NEJSDS covers a wide range of data science problems including novel statistical, analytical, computational and data management/manipulation methods; innovative applications of existing methods and practices in real-life studies; review and summary of notable developments in quantitative methods, software, data management, and other noteworthy aspects; perspectives of important research topics and historical notes; and educational notes on the step-by-step use of new software packages and insightful comments and suggestions about their pros and cons. The journal has multiple sections to accommodate the broad interests of authors and readers.

Section editors/co-editors handle reviews on submissions to their sections and make the final decisions. The co-editors-in-chief screen all submissions and pass relevant papers to suitable section editors. Here is the current structure and editorial board of the NEJSDS:

1.2 Rooted in the NESS Society

The NESS is a non-profit organization for statisticians and data scientists based in the New England region of the United States. It is known for its strong commitment to promoting the study and application of statistics and data science, and has a long history of supporting research, education, and professional development in the field. The organization has provided funding and resources for students and researchers, and has collaborated with other organizations and institutions to promote the advancement of the field.

One of the NESS's objectives is to promote the growth and expansion of statistical science in the New England area and beyond. Towards this objective, the official journal, NEJSDS, is created to provide a platform for the dissemination of cutting-edge research and innovative methods in the field of data science. Meanwhile, there has been an increased demand from various industries and academia for interdisciplinary research that bridges the gap between statistics and other data science-related fields. The journal meets this demand by providing a high-quality outlet for the publication of original research articles, review papers, and short communications that advance the frontiers of data science. By doing so, it aims to foster a strong community of researchers, practitioners, and students who are interested in the application of statistical principles and methods in data science, and to provide opportunities for them to engage with each other.

2. REVIEW PROCESS

NEJSDS is proud to be a pioneer in the reform of the traditional peer review process by implementing a new hybrid journal review process. In this new review process, authors have the option to supply referee reports invited by the authors, as a supplement to the traditional review reports led by the editorial board. In addition, authors are encouraged to suggest reviewers of their articles for the traditional review process. The decisions will take into consideration both review reports initiated by the authors and the reports initiated by the editorial board. The optional author-led open review aims to facilitate instant discussions and dissemination of the work. It also tries to ensures that novel researches and ideas are evaluated by experts and relevant researchers in the field. We also hope the open review helps to reduce biased opinions and lack-of-constructive feedback.

Currently, authors interested in providing open reviews can upload the review reports they solicited as supplementary materials when submitting the article. We have a plan to provide an open platform for authors to post their papers and collect open reviews from the research community. Both the paper and reviews will be open to everyone. Reviewers will be encouraged to provide constructive and detailed feedback to authors, highlighting strengths and weaknesses of the manuscript, and providing recommendations for improvements. Reviewers will also have the option to provide feedback to each other, promoting collaboration and knowledge sharing within the statistics and data science community. The platform will allow continuous discussions even after the paper is accepted, so authors, reviewers, and readers can keep interacting with each other, with the possibility of continually improving the work and generating new ideas.

3. PROMOTION OF THE JOURNAL

The editorial team has spent significant efforts with various activities to promote the new journal.

3.1 Conference Sessions

The following invited sessions at statistical conferences have been organized to increase the awareness of NEJSDS. They featured many great presentations and insightful discussions.

- Invited Papers from the New England Journal of Statistics in Data Science, *the 35th New England Statistics Symposium*, Storrs, Connecticut, 2022.
- New England Statistical Society Invited Papers on Novel Developments and Future Directions of Statistics

in Data Science, *Joint Statistical Meetings*, Washington, DC, 2022.

We also submitted proposals to future statistical conferences and the following sessions have been accepted. We hope these sessions will help the NEJSDS reach a wider spectrum of the statistics and data science community.

- The New England Journal of Statistics in Data Science (NEJSDS) Invited Papers onInnovative Clinical Trial Designs, *WNAR/IMS annual meeting*, Anchorage, Alaska, 2023.
- The New England Journal of Statistics in Data Science Invited Papers on the Analysis of Complex Data, *the 64th ISI World Statistics Congress*, Ottawa, Canada, 2023.
- Design and Analysis of Experiments for Data Science, *the 64th ISI World Statistics Congress*, Ottawa, Canada, 2023.
- NEJSDS Invited Papers on Novel Machine Learning Methods for Complex Biomedical Studies, *Joint Statistical Meetings*, Toronto, Canada, 2023.

3.2 Journal Discussion Webinar

We will launch a new webinar series to promote NEJSDS. The webinar will be online and open to everyone; it will last for one-hour including a presentation from the author(s), discussions from the panelist, and Q&A with audiences. The inaugural webinar of this series will present Professor Xiaoli Meng's paper [1], to be held 1-2 pm eastern time on Tuesday, May 16, 2023. The webinar will use UConn Webex Webinars, and we welcome everyone to register and attend. Here is the registration link: https://uconn-cmr.webex.com/weblink/register/r2d0215d4a35ad92639a33639655c5612.

3.3 Special Issues

We have issued six special issue calls on the following topics.

- Modern Bayesian Methods with Applications in Data Science (submission deadline: July 15, 2022)
- Design and Analysis of Experiments for Data Science (submission deadline: October 1, 2022)
- Game-theoretic Statistics and Safe Anytime-Valid Inference (submission deadline: April 15, 2023).
- Novel Statistical Methods and Designs for Clinical Trials (submission deadline: March, 31, 2022).
- Dose Finding and Related Topics in Drug Development (submission deadline: June 1, 2024)
- Causal Inference: past, present, and future (September 1, 2024)

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REFERENCES

[1] Meng, X.-L. (2022). Double Your Variance, Dirtify Your Bayes, Devour Your Pufferfish, and Draw your Kidstrogram. *The New England Journal of Statistics in Data Science* 1–20. https://doi.org/10.51387/22-NEJSDS6.

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