Call for Contributions:

Special Issue of Journal of Data Science on

Statistical Foundations of AI

Deadline: February 28, 2027

The Journal of Data Science (JDS) (`https://jds-online.org`) invites submissions for its October 2027 special issue on "Statistical Foundations of AI." This initiative is associated with the Conference on Statistical Foundations of AI, to be held on November 13–14, 2026, at the University of California, Santa Barbara. The conference marks the launch of the Center for Statistical Foundations of AI at UCSB and brings together researchers in statistics, machine learning, and related disciplines.

This special issue seeks to advance principled, interpretable, and trustworthy artificial intelligence (AI) through rigorous statistical methodology. In keeping with the conference's aims, we welcome work that connects theory, methodology, and applications, including original research articles, computational contributions, applications, reviews, tutorials, and perspectives. Contributions may target any of the JDS sections: Philosophy of Data Science, Statistical Data Science, Computing in Data Science, Data Science in Action, Data Science Review, and Education in Data Science. Submissions are welcome from the broader research community, including papers not presented at the conference, provided they fit the theme of the special issue.

All manuscripts must contain original, unpublished work that is not under consideration for publication elsewhere. Submissions will undergo the journal's regular, fast review process, including a reproducibility check. Our reproducibility team runs the submitted code to verify that it reproduces the reported results. Before submitting, please review the JDS author instructions, paying particular attention to preparation for the reproducibility check. Supplementary materials will be hosted in the JDS collection on Harvard Dataverse to support reproducibility and long-term access. Please identify the special issue title in your cover note when submitting through the JDS submission page. Finalized papers will be made available online immediately, ahead of publication in the October 2027 issue. We look forward to your submissions.

The Journal of Data Science publishes research on a wide range of topics involving the understanding and effective use of field data. This special issue aims to promote cross-disciplinary collaboration and advance statistical principles and practices for trustworthy AI. All JDS articles are open access, with no article processing charges. The journal offers fast review and promotes reproducible data science.

Guest Editors:

- Xuan Bi, Department of Information and Decision Sciences, Carlson School of Management, University of Minnesota
- Rui Duan, Department of Biostatistics, Harvard T.H. Chan School of Public Health
- Irina Gaynanova, Department of Biostatistics, University of Michigan
- Yuqi Gu, Department of Statistics, Columbia University
- Xiao Wang, Department of Statistics, Purdue University