

MIBE

GMS Medizinische Informatik, Biometrie und Epidemiologie

The German Scientific Journal of GMDS

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Call for Papers for a Focus Theme “Synthetic Data”

Synthetic data hold great promise in addressing critical challenges, such as safeguarding personal information and overcoming the scarcity of training data for machine learning. Meanwhile, advances in generative AI have significantly broadened the methodological toolkit for data synthesis. However, these opportunities come with notable challenges. Those relying on data synthesis for anonymization must remain vigilant to the substantial risks of re-identification. Additionally, using synthetic data for machine learning can result in skewed training outcomes or even the failure of the entire process. The implementation and training of data synthesis methods also raise important data protection concerns, potentially requiring secure federated data processing. Finally, the creation of high-quality synthetic data introduces the troubling possibility of fabricating scientific evidence, posing a serious threat to the integrity of scientific quality assurance. The generation, use and quality assurance of synthetic health data challenges all medical information and data sciences. The challenge is current and urgent. That is why we are calling for MIBE contributions with this focus.

We request original work that has not yet been published elsewhere and has not yet been submitted to other journals. The instructions for the preparation of manuscripts are available on <https://www.egms.de/static/en/journals/mibe/authors.htm>. There you will also find a link to manuscript submission. Please indicate "focus theme synthetic data" when submitting. Submissions for this focus theme are open until March 15th, 2025.

The open access journal MIBE offers publication opportunities beyond those offered by other journals. Free of charge - for readers and authors. For example, research data, software, videos, and other attachments can be added to a publication. Papers dealing with the solution of regional problems in the German-speaking area can be published as well as articles of international interest.

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