Special Issue

Advancing Healthcare Analytics: The Role of Federated Learning and Explainability in Ensuring Data Privacy and Security

Message from the Guest Editors

Federated learning and explainability are two emerging technologies that have the potential to revolutionize healthcare analytics by enabling secure and privacy-preserving collaboration between multiple healthcare institutions. This Special Issue aims to explore the role of these technologies in advancing healthcare analytics and ensuring data privacy and security. We welcome original research and innovative ideas on how federated learning can be used to collaborate effectively and efficiently in a distributed healthcare environment. The goal is to provide a platform for researchers, clinicians, and practitioners to share their insights and experiences on how these technologies can be harnessed to improve healthcare management and better livelihood, while safeguarding patient privacy and data security. The topics of interest include but are not limited to Advancing Healthcare Analytics:

- Federated learning techniques for healthcare data management;
- Explainability in healthcare analytics: methods and applications;
- Federated-learning-based predictive modeling for personalized medicine;
- Privacy-preserving machine learning for healthcare analytics.

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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