Special Issue

Applications of Artificial Intelligence in Modern Astronomy

Message from the Guest Editor

Artificial intelligence (AI) has revolutionized modern astronomy, offering innovative solutions to analyze vast amounts of data generated by telescopes and satellites. AI algorithms excel in pattern recognition, making them ideal for detecting celestial objects and phenomena, such as exoplanets, supernovae, and galaxy formations. Machine learning models can sift through terabytes of data to identify subtle patterns that might be missed by human observers. Moreover, AI enhances the efficiency of data processing, allowing astronomers to focus on hypothesis-driven research rather than data management. It also plays a crucial role in predictive modeling, helping to forecast cosmic events and optimize observational strategies. As AI continues to evolve, its applications in astronomy are expected to expand, potentially leading to groundbreaking discoveries about the universe we inhabit.

Guest Editor

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Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

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