Qeios

Peer Review

Review of: "Kepler: The Pioneer of Data Science and AI"

Konda Mani Saravanan[1]

1. Department of Biotechnology, Bharath Institue Of Higher Education & Research, India

To enhance this paper, several questions could be addressed: How did Kepler's data analysis differ from modern AI beyond scale, and could AI have derived his laws without prior human knowledge (e.g., the Copernican model)? What specific challenges in Brahe's data might hinder AI today, and how do symbolic regression or KANs improve interpretability over black-box models? Are there ethical risks in overtrusting AI-generated hypotheses, and can AI emulate Kepler's intuitive leaps (e.g., rejecting circular orbits)? How might frameworks for human-AI validation ensure rigor, and which historical breakthroughs (e.g., quantum theory) could benefit from AI reanalysis? Could the conclusion better synthesize contributions, and would expanding on cited examples (e.g., CERN's AI) strengthen the argument? Finally, how might metacognitive AI, like DeepSeek-R1-Zero, transform hypothesis generation in fields like cosmology or medicine?"

Declarations

Potential competing interests: No potential competing interests to declare.

doi.org/10.32388/MZAXJ3