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52nd IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps (A4)
Interactive Presentations - 52nd IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps (IP)

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MACHINE LEARNING AND AI IN SETI

Abstract

Have you ever wondered if there are any intelligent species out in the universe? Scientists around the world are working on Techno Signatures, which are measurable properties or effects that provide scientific evidence of technology by other species. Defining intelligence is a challenge: it involves the ability to derive information, learn from experience, adapt to the environment, and correctly utilize thought and reason. One way to measure intelligence is by assessing the progress of technology and creativity. Our paper proposes a technique for searching for extraterrestrial intelligence: launching robotic interstellar probes and organizing a strategy for seeking out such probes launched by more advanced societies. This paper incorporates a deep learning model to optimize the search for intelligent life. One of the main challenges is to refine the RFIs (radio frequency interfaces). This paper roposes a machine learning and AI model to analyze data collected by radio telescopes and identify potential signals from intelligent life. It also deals with developing protocols for how to respond to the discovery of extraterrestrial life to ensure a coordinated and appropriate global response.