



### **Join the Quest to Revolutionize Space Debris Tracking!**

The Committee on Space Research (COSPAR) Panel on Innovative Solutions (PoIS) is thrilled to announce a groundbreaking public challenge in support of the Panel on Potentially Environmentally Detrimental Activities in Space (PEDAS) and with input from the Panel on Machine Learning and Data Science (PMLDS). We're calling on the worldwide community of professionals and enthusiasts to join forces and tackle one of the most pressing issues in space exploration: space debris tracking.

#### **The Challenge:**

As space becomes increasingly congested, the risk of collisions and damage to operational satellites and other space-based assets grows. With over 100,000 objects one centimeter in size or larger populating the space around Earth, the need for innovative solutions to track and characterize these objects has never been more urgent. Current methods are limited by computational resources and struggle to keep pace with the rapidly evolving space environment.

#### **Your Mission:**

We're inviting you to harness the power of artificial intelligence and machine learning (AI/ML) to develop a revolutionary new approach to space debris tracking. PoIS, PEDAS and PMLDS members will provide expert guidance and support as you work to create innovative solutions that can detect, track, and characterize space debris more effectively. You'll have access to relevant data, expertise, and computational resources to help you tackle this complex challenge.

#### **The Reward:**

The winning approach will receive a prestigious award at the Scientific Symposium in Nicosia, Cyprus in November 2025, recognition as a leader in the field of space situational awareness. But that's not all - your innovative solution will have the potential to make a real impact on the future of space exploration and help safeguard the long-term sustainability of space activities.

#### **Join the Challenge:**

Don't miss this opportunity to be part of a global effort to revolutionize space debris tracking. Declare your interest by sending an email to the PoIS chair, Eric Smith, at [eric\\_h\\_smith@mac.com](mailto:eric_h_smith@mac.com) by 15 April 2025. We'll provide you with a series of papers and video meetings to get you started on this exciting and impactful project. Join the quest to shape the future of space exploration and make your mark on the cosmos!

Sincerely,

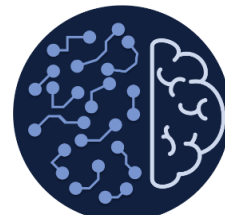
Eric  
Chair, PoIS



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