AI, Space Data and the Promise of Improved Planetary Stewardship

Name and affiliation of the keynote speaker: James Parr
FDL/NASA/ESA, UK

We now have the unprecedented opportunity to monitor, predict and simulate our planet in near real-time. This has been enabled by twin revolutions; firstly the emergence of high-resolution, high-temporal and hyper-spectral geospatial data and secondly, the emergence of cloud compute and trusted, democratised AI infrastructure capable of learning from both data and physics. This talk will discuss the implications and opportunities unlocked by these two revolutions, both in terms of the "stack" required and some emerging applications, such as AI's predictive capabilities - tornadoes and droughts, but also dynamic 'just in time' applications, such as near-real-time flood segmentation, bushfire mitigation and post-disaster damage assessment.

Short Biography:
James is Director of NASA's Frontier Development Lab (FDL) an AI research accelerator based in Silicon Valley and FDL Europe, in partnership with European Space Agency (ESA). He is also a founder of the Open Space Agency (OSA) - which is dedicated to the democratization of space exploration through citizen science and open hardware. James is also the founder and CEO of Trillium Technologies - a technology contractor that specializes in the application of emerging technologies to grand challenges, such as climate change, violent extremism, prevention strategies for cancer and obesity, deforestation mitigation, climate resilience and planetary defense from asteroids.