

Esri and Microsoft Join Forces on Artificial Intelligence



Land cover mapping is a critical part of conservation planning, but current methods for collecting detailed geographic data are highly labour-intensive. Advanced technologies like artificial intelligence (AI) can help but are not yet widely accessible to those on the front lines of conservation and mapping. That is why Esri announced a collaboration with Microsoft to provide greater access to these technologies through a newly aligned grant process.

Spatial analytics is a crucial part of conservation, because it is an inherently geographic field, said Jack Dangermond, Esri founder and president. Understanding environmental data in the context of location is necessary when making decisions about protecting fragile ecosystems. The ability to analyse the vast quantities of data present in our environment is

critical, and this collaboration allows conservationists to do their job more accurately than ever before on a wider scale.

Advanced data solution

The aligned grant process will allow eligible organisations and individuals to receive Esri's premier geographic information system (GIS) software as well as access Microsoft's leading cloud and AI tools. These include Esri's ArcGIS and Microsoft's Data Science Virtual Machine and Cognitive Services offering, in addition to Azure credits.

These tools and this alliance have already demonstrated considerable promise for organisations focused on mapping – one example is Chesapeake Conservancy. It has done a great deal of work to protect and restore the local watershed, but the organisation needed more accurate data to do precision conservation – investing in the plantings that are most impactful, in the areas that most need them. Esri's mapping technology, powered by Microsoft Azure, produced dynamic land cover products in minutes and allowed Chesapeake Conservancy to see exactly where planting would be most effective. This advanced solution was demonstrated at the Esri User Conference during the opening Plenary Session. Microsoft joined Esri and Chesapeake Conservancy onstage and demonstrated how AI can be executed on a national scale quickly and accurately, allowing researchers and communities nationwide to benefit.

Human ingenuity and AI

Microsoft believes that human ingenuity and AI can pair together to tackle some of our biggest societal challenges – including managing climate, water, agriculture, and biodiversity resources. The software giant is excited to work with Esri to deliver AI technology to researchers and organisations that will help them address these challenges, said Lucas Joppa, chief environmental scientist at Microsoft.

Additionally, Microsoft AI will integrate with Esri's Living Atlas of the World – the largest collection of global geographic information available – and ArcGIS Image Server, a massive collection of imagery, to help users perform high-resolution image classification and generate insight into land cover changes that go far beyond current capabilities.

Learn more about how the Azure for Research Award provides innovative tools to help manage complex environmental challenges [here](#).