

Leveraging AI in Global Mapper for extracting data from high-resolution point clouds and imagery

Jenna Nelson (USA)

Key words: Bridge surveying; Cartography; Coastal Zone Management; Engineering survey; Land management; Mine surveying; Remote sensing; Spatial planning; Young surveyor

SUMMARY

Utilizing Artificial Intelligence (AI) driven methods such as Machine Learning (ML) and Deep Learning (DL), is becoming commonplace to address numerous tasks across industries and domains. The geospatial industry is no exception. Modern remote sensing techniques provide easy access to high-resolution datasets in raster and point cloud formats. Extracting valuable information from these data sets traditionally required human input and vast quantities of time. AI-based methods can be leveraged to quickly derive insights from large amounts of data, enabling faster decision-making and planning. Global Mapper Pro helps to bring AI-driven tools to geospatial data and workflows through machine learning methods in point cloud classification and deep learning image analysis models in the new Insight and Learning Engine. This talk will discuss the AI techniques involved in Global Mapper's feature identification tools for Custom Point Classification and in the new Global Mapper Insight and Learning Engine™.

Leveraging AI in Global Mapper for extracting data from high-resolution point clouds and imagery (13082)
Jenna Nelson (USA)

FIG Working Week 2025
Collaboration, Innovation and Resilience: Championing a Digital Generation
Brisbane, Australia, 6–10 April 2025