

Spatial Data Science: The New Frontier in Analytics

Saad Ahmed Jamal

November 2022

1. What did you learn from this MOOC? You may want to highlight one (or more) specific item(s).

This course allowed me to explore options in ArcGIS Pro and its features to related the deep learning. Learning about its geo-enrichment capability to training and applying object detection models to story maps. ArcGIS has alot of options and it has got the best visualization of spatial data. It has ability of brushing that is to simultaneously highlighting the data on map by selecting its attributes. With its new ability to plot scatter plot matrices, it has got all essential features to perform data analysis for in depth review of data, before creating a learning algorithm. This MOOC, introduces to use a Machine Learning model, Random Forest, for prediction through a graphical user interface based (GUI) plateform. There were practicals on pattern detection, outlier removal, hot-spot analysis and object detection. Using deep learning for object detection was an interesting feature. It was an advanced remote sensing analysis capability added into ArcGIS Pro and I enjoyed the most while preforming this exercise.

2. Write one paragraph to a friend/colleague, motivating them to join a future instance of this MOOC with respect to this person's professional domain.

This course is beneficial for all students in Geoinformatics. I would particularly encourage students that are going for geo-datascience to take this course during the first year of there degree as It would help them know the applications that are being used practically, related to there field of interest. There are things that would be learnt in Machine Learning course in further detail such as train and use different models. But there would be more of programming related stuff in geodatascience track. This gives an overview of Geo- Data Science applications in GIS industry.