

PRACTICE OF AI IN GEOMATICS WITH ARCGIS PRO

TRAINING OBJECTIVES

How can AI practically assist you in your geomatics work? What are the tools and risks involved?

The objective of this training is to provide the keys to understanding AI as applied to the fields of land management, geomatics, and their associated data and challenges.

It is designed for businesses, government agencies, and local authorities alike



TARGET AUDIENCE

IT directors, geomatics specialists, urban planners, climate experts, etc.



PREREQUISITES

Knowledge of GIS and geomatics.

Must have an ArcGIS Pro license with the Image Analyst extension (arx iT does not provide Esri licenses to trainees for the duration of the training)

Bring your own laptop to the training with the Esri licenses installed and active



TRAINING MATERIALS

Digital course materials provided to trainees (including real-world case studies, hands-on exercises, and technical data sheets)

Evaluation questionnaires and certificate of completion



DURATION > 2 days (14 hours)



REGISTRATION

Email > formation@arxit.com

Please contact us regarding accessibility for people with disabilities

PROGRAM

DAY 1

THEORETICAL INTRODUCTION TO AI

Understanding AI and its definitions

The Importance of AI in Geomatics

Introduction to Deep Learning

Neural Networks

The Dataset

The Concept of Model Training

Metrics and Model Validation

Concepts of Reinforcement Learning

Current Tools: Applications and Target Audience

MAJOR APPLICATIONS OF AI

Geospatial object detection

Instance Segmentation

Image and Data Classification

Detecting Changes in Geospatial Data

Other applications: regression, clustering, etc.

DAY 2

PRACTICAL EXAMPLES

Identifying problems that can be addressed by AI

Assessing implementation costs

Prospects and limitations

Designing a concrete corpus

Train a model and track metrics

Analyze and understand a model's results

Validate and qualify a model

The Lifecycle of an AI Model

PRACTICAL EXERCISE: IMPLEMENTING AI

Defining a business problem

Selecting the appropriate tools and methods

Preparing the dataset: selecting and formatting data

Training a Model: Monitoring and Interpreting Metrics

Analyzing the results and making decisions

Validate and qualify the resulting model

Understanding the model lifecycle

