2021 Workshops
May 24, 2021

Tripp Corbin – Full Day
Migrating To ArcGIS Pro

Are you an ArcMap user that is planning to migrate to ArcGIS Pro soon? This workshop will help you make the transition by showing you how to perform common ArcMap tasks in the new ArcGIS Pro application. You will learn how to create maps, manage layers, import ArcMap MXD files, connect to data sources, and navigate the ArcGIS Pro ribbon interface. This work shop will include lectures, demonstrations and hands-on exercises.

Learning Objectives:

Explain differences between ArcGIS Pro and ArcMap.
Understand the ArcGIS Pro hardware requirements
Navigate the ArcGIS Pro interface
Understand the anatomy of an ArcGIS Pro project
Create maps in ArcGIS Pro
Add and configure layers to a map in ArcGIS Pro
Create 3D scenes in ArcGIS Pro

Intended Audience:

Experienced ArcMap users looking to migrate to ArcGIS Pro

Prerequisites:

Basic familiarity with ArcGIS Pro.

Your Instructor:

Tripp Corbin is an award winning certified GIS Professional with over 30 years of experience in the Geospatial industry. He has assisted many organizations implement GIS into daily operations including City and County Governments, Utilities, Non-profits, Educational Institutions and Private Companies. Tripp holds multiple technical certifications from Esri, Microsoft, CompTIA and TechSmith. In addition he has written three books on ArcGIS Pro as well as teaches GIS classes for the Univ. of North Alabama Continuing Education and NC State Univ. Institute for Transportation Research and Education. Tripp is the GIS Implementation Manager for the Davey Resource Group where he oversees a team of GIS Solutions Architects that design GIS solutions for both internal projects as well as external clients.

Nathaneal Keith – Full Day
Editing In ArcGIS Pro

This workshop will introduce you to the data editing environment found in ArcGIS Pro. You will learn common editing workflow required to update spatial and tabular data, location of editing tools, and editing tips and tricks. We will also review various editing option settings so you can configure ArcGIS Pro to better meet your editing needs and experience.

Learning Objectives:

Editing Workflow and Options in ArcGIS Pro

How to create New Features

How to create New Features from Existing Features

How to modify Existing Features

How to edit Attributes

Intended Audience:

New ArcGIS Pro users or existing ArcMap users that will need to start editing data using ArcGIS Pro

Prerequisites:

Basic understanding and introduction to ArcGIS Pro

Your Instructor:

Mr. Keith serves as a GIS Analyst, Instructor and Support Engineer for the Davey Resource Group, Inc. He has over 12 years of experience with GIS, GPS and drafting applications. He is familiar with a variety of data models and methodologies for creating and maintaining GIS data. He is responsible for GIS data development, maintenance routines, map production, software implementation, application beta-testing and customer support. He is also one of Davey's lead instructors conducting beginner to advanced level GIS courses across the US on ArcMap, ArcGIS Pro, ArcGIS Online, ArcGIS Collector, and ERDAS Imagine.

Karsten Vennemann – Half Day
Maps and Project Land Cover Analysis

Discover the powerful capabilities that Free and Open Source Software (FOSS)[1] has to offer for remote sensing tasks and beyond. This 4-hour workshop will demonstrate how to perform a land cover analysis using Sentinel 2 imagery[2] using two different approaches. Participants are welcome to follow along with the workflow on their own machines if desired. Examples will include both the use of "Maximum Likelihood" and "Random Forest" classification algorithms. The first approach will show how to do a land cover analysis on QGIS desktop (on windows), while the second approach covers how to use the Goggle Earth Engine platform(GEE)[5] (a cloud-computing-platform based earth analysis engine) to do the same.

A brief overview of FOSS for remote sensing will be followed by an introduction to QGIS desktop[3] and the Semi-automatic Classification Plug-in (SCP)[4]. This covers a complete workflow of performing a land cover analysis in QGIS based on Sentinel 2 imagery at 10-meter resolution. Steps covered in this workflow include:
+ Selecting and obtaining imagery (direct queries, filtering of areas and imagery parameters, and download directly via the GUI in QGIS)
+ Creating a suitable band set for the land cover analysis depending on the satellite/imagery used
+ Preprocessing, conversion to reflectance, and simple atmospheric correction of imagery bands
+ Creating training areas for the land cover classification
+ Performing the land cover classification (Maximum Likelihood vs. Random Forest)
+ A brief overview of post-processing capabilities
+ Accuracy assessment and error correction
The second approach shows the use of the Goggle Earth Engine platform (GEE)[5] to perform a similar analysis. The use of GEE is free for academic and private purposes. Following the workflow of the first approach example scripts will be illustrated on how to run a Random Forest-based land cover analysis on a time series of sentinel 2 and sentinel 1 imagery.

Learning Objectives:

Learn land cover analysis using FOSS

Intended Audience:

GIS professionals with interest in Remote sensing

Prerequisites:

Desire to learn more about the use of FOSS

Your Instructor:

Karsten Vennemann is originally from Germany and has been living with his family in Seattle since 2004. He has been working as a GIS professional for over 20 years and gathered experience in the academic and private sectors, as well as in non-profit organizations, before founding Terra GIS, a GIS Consulting firm based in Seattle, in 2007. Karsten's background is in Geography and Soil Science, and he holds a Diploma (Master of Sc.) from the University of Stuttgart, Germany, in addition to a Master's Degree from UC Berkeley. From an early age, he has been interested in supporting environmental efforts to preserve natural resources and to protect natural plant and animal habitats. Following this lifelong passion, Karsten has worked with GIS in the context of natural resources, sustainable development, and social justice. Over the course of his career, he has served as an Environmental Scientist, GIS Analyst & Programmer, and Project Coordinator, working on various tasks including GIS project management, GIS analysis, cartography, remote sensing, development of web-based information systems, and implementation of spatial databases. In recent years, his work as principal consultant of Terra GIS has allowed him to contribute to a wide variety of projects in Europe, Africa, South America, and the Pacific Northwest (US). Moreover, for many years now Karsten has increasingly been using open-source geospatial software. He teaches classes in Open Source GIS and a good portion of his work as a consultant involves creating and supporting open-source-based Web GIS solutions. Throughout the last 15 years, Karsten has been a frequent speaker at GIS conferences and an active member of the OSGeo Foundation as well as the Open