

GEOG 432/832: Programming, Scripting, and Automation for GIS

Week 02.01: Geoprocessing in ArcGIS Pro

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Today's schedule

- Open discussion
- Geoprocessing workflows and examples

Open discussion

Geoprocessing

What is geoprocessing?

A process

- to perform spatial analysis and modeling
- automate GIS tasks

A typical geoprocessing tool:

1. takes input data (a feature class, raster, or table)
2. performs a geoprocessing task
3. produces output data as a result

loads o' tools

ArcGIS Pro contains more than a thousand geoprocessing tools

Examples:

- buffer
- adding a field to a table
- geocoding a table of addresses.

General schematic



Invoking geoprocessing

Options:

1. Work with the ArcGIS Pro GUI
2. Use the GUI to batch tasks
3. Create your own workflow or tool (*what's the difference*) with **ModelBuilder**
4. Use Python

Let's start with the GUI

Why are we starting with the GUI?

MORE HERE MORE HERE

Stawrt with PSU stuff

GUIS

Batching

Modelbuilder

Inspecting Python code

1.2.1

1.2.2

1.2.3

1.2.4

1.3.1

Environments (textbook)

Don't forget batching tools (see textbook)