# 2018 Missouri Mappers Association Conference Wednesday Workshops August 8<sup>th</sup>

## Introduction to ArcGIS Pro Workshop – Ken Wilkerson, GISEDGE, Inc.

This workshop helps you get ready for your conversion to ArcGIS Pro. We'll see how to import map documents into ArcGIS Pro and how to perform many of the tasks you are familiar with in your daily use of ArcMap: working with symbology and layer properties, building queries, running tools, making a layout, etc.

# GIS: Collection to Analysis to Final Product – Kristen Wenzel, TREKK Design

### Group, LLC

Through this workshop, we will be learning the benefits of using GIS, and understanding the process from start to finish. During the workshop, there will be field data collection, importing\exporting into GIS software, and learning different tools within the software to analyze what you collect. There are hundreds of programs out there for both the data collection side, as well as analysis. Together we will go through a few open source options, as well as the ESRI suite to get an overall understanding of what each program can do for you. In addition, we will cover a few new GIS technologies that have recently surfaced, and ones that are in the works. This presentation will not be specific to any one industry in order make sure every participant benefits from the workshop. Come with questions and figure out how GIS can fit for you!

## Getting Started with ModelBuilder - Ken Wilkerson, GISEDGE Inc.

Esri ModelBuilder (MB) provides a visual programming environment for combining data and tools to automate tasks and create custom tools. This course will introduce MB processing with hands-on exercises demonstrating the creation of models ranging from simple to complex. You will learn how to quickly and effectively develop models that help you become more productive ArcGIS users.

# Thursday Presentations August 9<sup>th</sup>

#### Keynote Speaker- Christopher Dunn

Chris Dunn is a veteran, business owner, practicing attorney, and expert geospatial witness. He holds a Juris Doctor from the University of Missouri - School of Law, Columbia as well as a Masters and Bachelors in geography from Kansas State University. His firm GeoVelo, LLC, uses Geographic Information Systems (GIS) and 3-D modeling software to make special purpose maps and 3-D digital crime scene reconstructions. Chris's favorite projects involve mapping and documenting complex, long-standing, property boundary conflicts. Past projects have required authenticating the boundaries and the chain of title to a time before Missouri's statehood. Prior to law school, Chris had a 20-year career as the director of several planning, zoning and community development departments. Prior to that, Chris spent some time overseas as an Explosive Ordnance Disposal (EOD) technician defusing IED's, and generally making a mess out of some very bap people's arms stockpiles and critical infrastructure. Chris regularly gives presentations on geospatial legal issues. He is a father, grandfather, member of the Missouri Bar, Eagle Scout, has won awards for his urban planning, filmmaking, and probono legal work. More information is available at www.MoGovLaw.com or www.GeoVelo.org





#### The Canary Project- Ryan Hunt & Jordan Coiner

Using public data from a variety of sources to complete a wide spectrum analysis of health and social factors to share with project and community partners using the ArcGIS Online Story Map platform as a sharable and presentable repository of this analysis and findings. I will be presenting on the GIS side of things, both analysis and setting up Story Maps. Jordan will be discussing the Health Dept side of the project with use cases, project reach, and some data methodology.

Ryan Hunt is a Senior GIS Specialist with the City of Springfield. He has worked with the City full time for a little over 2 years now. Prior to that Ryan was with an engineering consulting firm out of Joplin Mo for 2 years working on his own client base in training and GIS maintenance. Ryan graduated with a BS in Geology with a minor in GIS from Missouri State University in 2014.

Jordan Coiner is a Performance Management and Data-Driven Decision Making Specialist. He has worked at the Springfield-Greene County Health Department for nearly four years. Jordan graduated from Missouri State University in 2014 with a BS in Biology and a minor in Chemistry. His main focus is to encourage data-driven decision making in the department and community.

### Herrmann Brain Dominance Instrument- Karla Deaver

For some, taking the HBDI<sup>®</sup> suddenly identifies a lifetime pattern of personal and professional choices. For others, it sends signals as to which area of interpersonal growth cries out for development. And yet others find that HBDI<sup>®</sup> results lend insight to the inner workings of past and current relationships with family members and friends. Karla's presentation will focus on getting to know ourselves and our thinking styles.

Karla Deaver is a 4-H Youth Development Specialist with University of Missouri Extension, headquartered in Lawrence County. She holds a M.S. in Dairy Science from the University of Missouri-Columbia, and a B.S. in Dairy Science from Missouri State University. Karla is a certified practitioner of the Herrmann Brain Dominance Instrument, a quick, easy-to-take survey that registers and interprets thinking preferences.

### ESRI Survey123 - Joe Madej & Carol Burnis

Carol and Joe will be talking about ESRI Survey123. They will be talking about how to turn your paper form into a usable crowdsourced data collection form.

Carol Burnis has over 10 years of experience in the GIS/Mapping industry in various roles. Previous to working for Seiler, she worked for a local municipality's Public Works, Planning and Parks departments performing field collection, data analysis, cartography, database design/maintenance, training and support. Before starting this role, Carol provided Mapping Technical Support to Seiler's customers across all markets and hopes to be a resource to our customers in this position as well.

Joe is a member of the Seiler Instrument Mapping Technical Support team in St Louis, MO. He serves in technical support and a Certified Trimble trainer of both Trimble mapping hardware and software. Prior to Seiler, Joe has spent his 10+ year GIS career working on Federal and Local Government projects, rural water line mapping, and field data collection. Joe holds a Bachelor's degree in Science with and Area of Specialization in GIS from Southern Illinois University Edwardsville. He also hold his GIS Professional Certification.

#### **UAS Mapping** - Steve Kasten

UAS mapping has become a popular topic today for GIS professionals. Many GIS users are making use of imagery and mapping data extracted from UAS imagery. As the software for these applications has developed, we have seen various levels of accuracy and precision being created. This presentation will address some of the issues associated with the collection, processing and exploitation of UAS imagery and present techniques to assess and assure the quality of the data produced.

Steve Kasten has over 35 years of experience in the fields of photogrammetric engineering application development, photogrammetric mapping, geodesy, cartography and surveying. While at Surdex, Steve has performed disparate duties that include the management of photogrammetric projects, airborne GPS survey data and triangulation. In addition to his extensive project management experience, Steve has experience providing direct photogrammetric engineering support services. He is skilled in developing algorithms for sensor modeling, post processing of GPS data, error propagation, photogrammetric data reduction, and implementing algorithms into engineering programs.

#### Python - Next Level: User Interface, Error Logging, Configuration Files – Robert Meier

This presentation will introduce TKinter, the most popular GUI library for Python. You will learn how to create basic forms with buttons, labels, text boxes and list boxes, as well as, call message, file and folder dialogs.

For lengthy and complicated scripts, error catching and logging can be an important debugging tool, you will be shown how to create a log file, catch errors and log different messages.

Configuration files can add versatility to a script, instead of hard coding values in your code, read them from a configuration file. Holding values (file paths, field names, text values, etc.) in a configuration file specific to a process or client, can make one script usable for multiple jobs.

Robert "Bert" Meier has been a GIS professional for over 25 years. He has experience ranging from data creation to application development. He has worked in municipal government and private industry where he provided GIS services to public works, water, wastewater and rail clients. He is an expert in most ESRI software and an experienced developer using, C#, VB, JavaScript and Python. Currently with TREKK Design Group, Bert is using his programming skills to automate Sanitary Sewer Evaluation Studies and MACP data processes.