



CARIGEO Student Competition

#YourCaribbeanStory

Introduction to Visualization

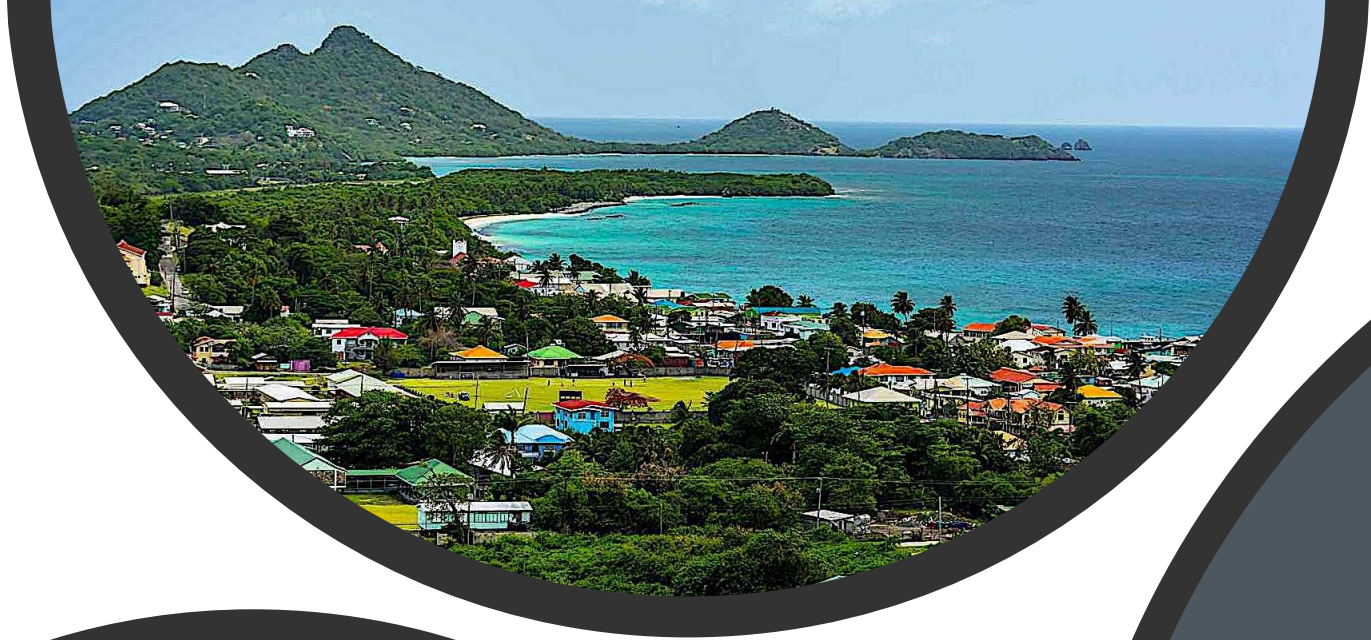


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An aerial photograph of a coastal town in the Caribbean. The foreground shows a dense cluster of colorful buildings with red, blue, and green roofs. A large green field is visible in the middle ground. The town is situated on a hillside overlooking a turquoise bay. In the background, there are more hills and islands in the distance under a clear sky.

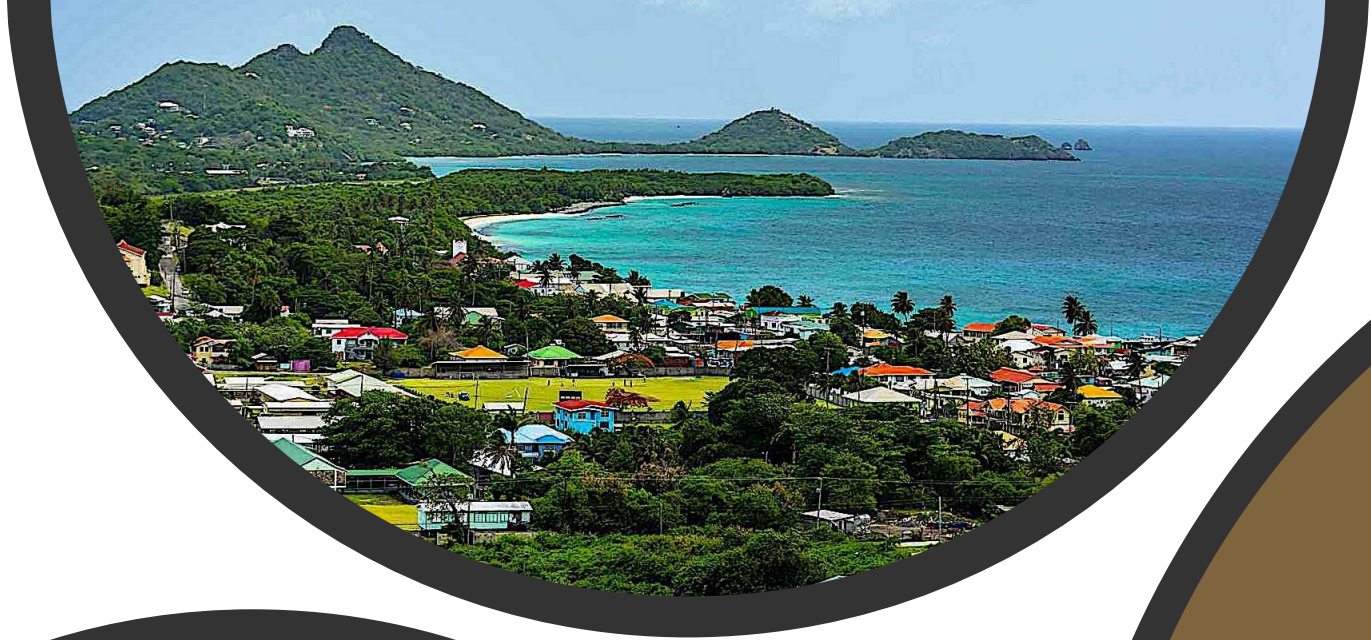
- Agenda
- Overview of contest
- Introduction to Visualization
- Demonstration
- Resources to support you
- Open Q/A
- Close

<https://yourcaribbeanstory.caribbeangeoportal.com/>



Ms.
Kathy Cappelli

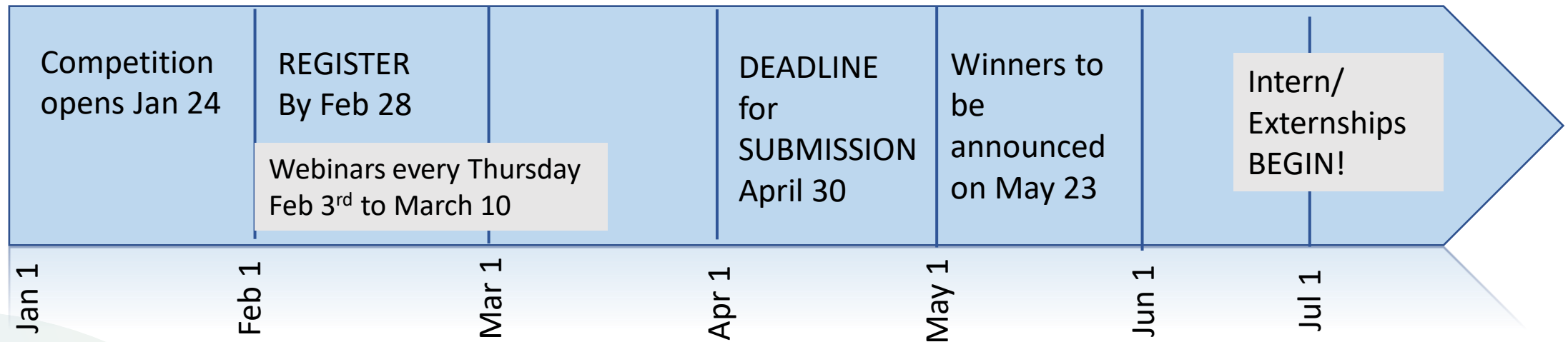
Senior Product Engineer,
Learn ArcGIS Team, Esri



Ms. Delphine Khanna

Senior Product Engineer,
Learn ArcGIS Team, Esri

Competition Basics




**Registration Deadline
EXTENDED to March 15th**

Competition Basics

- Decide which track you want to participate in
 - Place Based Storytelling – Track 1

Spatial Thinking Student Competition Finalists 06 / 12



Pollinator-friendly coffee farms: Where might they bee?

Modelling pollination services by wild bees in Santa Maria de Dota, Costa Rica

Leslie Spencer
December 20, 2020

Spatial Thinking Student Competition Finalists 02 / 12



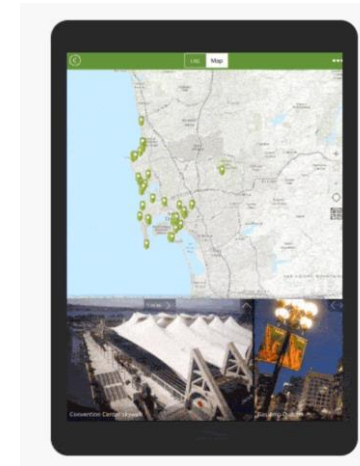
The Capybaras of Florida

Rodents of Unusual Size in the Sunshine State

Bahar Pahlevani - Master in Conservation Medicine Candidate-MCM 591
December 17, 2020

Competition Basics

- Decide which track you want to participate in
 - GIS Application – Track 2



Build or Configure an engaging and useful app

And then tell us all about it!

Poll Question

Introduction to Visualization

Before you make any map, ask yourself these crucial questions:

- What is the purpose of the map?
- Who will read it?
- What is the story in the data?
- Where and how will you share the map?
- Continue to ask these questions throughout the process.

Resources to help you succeed

- [Cartography checklist for map purpose](#) - This is part of a larger course with many more reference materials but start with this checklist.
- [Symbology checklist for visualization](#)- The second module of the Cartography course, with a helpful checklist for making sure you've chosen each aspect of how to display your map.
- [Create a policy map to address health conditions](#) - Map Census data to find areas with poor health.
- [Design symbology for a thematic map in ArcGIS Online](#) - Create a population map by symbolizing several different layers to work on the same map. This short lesson includes a lot of explanation on color, shape, and size of symbols.
- [Plan education outreach with Mexican census data](#) - Symbolize Mexican census data to show areas of high and low academic attainment. Use color ramps and effects to create a visually appealing map.

Some terminology

- **Qualitative**- Descriptive data, expressed in language instead of numerical values
- **Quantitative** - Data that can be counted or measured
- **Graduated colors** - used to show a quantitative difference between mapped features by varying the color of symbols to indicate a progression of numeric values
- **Graduated symbols** - represent differences in magnitude of a phenomenon, because larger symbols are naturally associated with a greater amount of something.
- **Normalization** - Dividing a raw count by another number (e.g. population) to contextualize it and create a ratio that can be compared
- **Histogram** - A graphical representation of data where data is grouped into continuous number ranges and each range corresponds to a vertical bar.

Visualization checklist

- What question do you want this map to answer? What message do you want it to convey?
- Is the data qualitative (types of things) or quantitative (number of things)?
- Have you tried different symbology methods on your data?
- Does your data appear as the most important thing on the map? If you changed the basemap would the data stand out more?
- Can you make this map using fewer colors?
- Can you replace complex symbols with simpler ones?
- Can you convey more with this map by making multivariate symbols? Should you?
- Do you have too many types of symbols? Can you group some of them together into the same symbol?

Visualization checklist

- Will people have to consult the legend multiple times to understand what the symbols represent?
- Will color blindness prevent some people from being able to understand the map?
- Do the colors of this map match the intended tone? Are they too cheerful, too somber, too alarmist, too quirky?
- Can you find a map, poster, photo, or other graphic document to borrow colors from?
- Do you need a basemap?
- Should you change the transparency or color of the basemap?
- Have you accounted for the differences in size between different regions by mapping a rate or ratio instead of total values?

Open Q/A

Webinar Series

- Starting on Feb 3rd – every Thursday 12 noon eastern
- Feb 3rd Preparing for the competition
- Feb 10th Get Started with Mapping
- Feb 17th Creating a Good Story with ArcGIS StoryMaps
- Feb 24th Get Started with Analysis
- Mar 3rd Introduction to Visualization
- **Mar 10th Building an App 101**

Register now!

<https://www.eventbrite.com/e/yourcaribbeanstory-webinar-6-introduction-to-apps-tickets-289992053037>



Thank you!

Be sure to join us next week

