

Notes from Geospatial/GIS Meetup

September 15, 2022

via Zoom

Attendees: Janet Reyes, facilitator;
Via Zoom: Bernie McGhee, Canserina Kurnia, Gabriela Olguin, Gerald Winkel, Kruti Mehta, Naren Kulkarni, Shanon Langlie, Simi Johnson

Announcements

This meeting was recorded; video is available [here](#). The passcode to view is 7F=P7hUh

Meetups for Fall quarter have been scheduled for October 13, November 10, and December 8. All are on Thursdays. Topics will include launching a UC-wide GIS course; urban planning; and using GIS to support naval bases. Watch the events section of the [UCR Library website](#) for the Eventbrite information.

On September 21 at 8:00 am, Esri is providing a [webinar](#) on changing over GIS instruction **from ArcMap to modern GIS**.

UC GIS Week is returning as a virtual event from November 15 through November 17. Complete [this form](#) by September 23 to submit a proposal to give a presentation, enter a map, or participate on a panel.

The next Esri [GIS in Higher Education chat](#), on Tuesday October 4 at 9:00 am PDT, will cover “**Teaching and Learning with Smart Mapping in ArcGIS Online**.”

Canserina shared that on October 6 at 10:00 am there will be a webinar on [Drone Solutions for Academia](#).

Plans are in the works for workshops and office hours provided by staff from [Planet](#). Tentative dates are October 26 and 27. The events would be hosted in the library.

“The [2022 Tribal ArcGIS StoryMaps Challenge](#), hosted by Esri, encourages US tribal nations and tribe members and college students to tell place-based stories about tribal heritage and sustainability.” The submission deadline is November 18.

Canserina shared Esri is providing a webinar on [Drone Solutions for Academia](#) on October 6.

First-time Attendees

Kruti Mehta is a Ph.D student and teaching assistant of University of Ottawa, Canada working on GIS, Geomatics, urban planning and deep learning. Kruti is seeking information about internship/ entry-level positions and the GIS industry.

Bernie McGhee, Gabriela Olguin, Naren Kulkarni, and Simi Johnson were also first-time attendees.

Welcome all, and we hope to see you again!

Presentation

Gerald Winkel, Disaster Program Manager for the American Red Cross of Riverside, gave a presentation on [MapSwipe](#), a data verification app developed by the [Red Cross](#) as an outgrowth of the [Missing Maps](#) program.

The Red Cross uses geospatial data in its emergency response and recovery programs. Accurate and up-to-date geospatial data is crucial in understanding predicted paths and severity of natural disasters, as well as the immediate location and condition of impacted areas so that resources can be mobilized effectively. For health emergencies, geospatial data comes into play in relation to contact tracing and understanding population movements.

[OpenStreetMap](#) (OSM) is a GIS basemap that is built by volunteers. OSM is a valuable resource to many users, especially those without access to proprietary GIS. However, unequal coverage of the world and variation in timeliness of updates are a couple of OSM's shortcomings in relation to the needs of humanitarian organizations.

To help fill the gaps in data needed by emergency responders, the Red Cross created the Missing Maps program in 2014. A big part of the effort was engaging volunteers in mapathons worldwide to trace features from satellite imagery. MapSwipe was created more recently as a means of improving the data quality of features created by Missing Maps volunteers.

MapSwipe can be downloaded from the App Store or Google Play. Gerald showed the introduction screens that appear and actions to take once the user has installed the app. The user is then presented with several missions to choose from. The missions may be projects of the Red Cross, Doctors Without Borders, or other humanitarian organizations. On the "More" tab, the user has the ability to change settings, email MapSwipe with questions, or see their status based on how many swipes have been completed.

Gerald demonstrated what happens once a user chooses a mission, using OSM building validation in Rwanda as an example. (Other missions might ask the user to choose whether there are any buildings in the image.) The user is presented with an optional short tutorial before starting. Each mapping session provides 36 images to review.

In missions for validating building outlines, offsets between the outlines and the building location on the image are fairly common. One reason this might occur is the change between the imagery used in the original delineation and the more recent imagery now being viewed. Gerald gave examples of when a delineation might be given an acceptance evaluation of "Yes," "No," or "Not Sure."

MapSwipe has many positives, including that it is fun and easy for users, helps humanitarian workers, and will introduce some users to mapping.

Feel free to contact Gerald at gerald.winkel@redcross.org with any questions.

Discussion

Janet asked if MapSwipe is only available on mobile devices. Gerald said yes, although there might be portals that allow emulating the app on a laptop. They also clarified that the building verification missions do not allow the user to map buildings that lack a delineation, and that mobile homes and huts should be included as buildings.

Kruti asked whether this kind of data could be used to assess gentrification. Gerald said that it could be used that way. He has seen projects where the user is asked to compare satellite images of areas in Brazil to detect deforestation. Other projects involve identifying mobile home parks, which are of interest since they have heightened susceptibility to damage.

Simi asked if GIS has a role to play in correlating mental health risks with place. Gerald isn't aware of any studies like that, but mapping disaster areas can indicate the extent of neighborhoods in which mental health services may be required as residents try to cope with the impacts.

On the topic of early-career opportunities, **Canserina** shared that Esri has opened applications for interning during Summer 2023; the deadline for applying is in December. Follow [this link](#) to find out more about specific types of internships. Undergraduates and graduate students may apply. Applicants are screened by the team at Esri for whom the intern would work; some are interviewed. There are probably 200 internship positions available. Although it is competitive (in the past, around 1 in 7 applicants have been accepted) a student can apply for more than one position. Interns also get professional development support from Esri HR. Summer interns often become a close-knit cohort.

Shanon asked about projects that people are working on or excited about. Janet mentioned that she is hoping to launch a project to make the library's collection of historic aerial photographs of Riverside and San Bernardino counties more accessible to users. This includes scanning some of the photos that aren't currently available digitally.

Kruti asked about registering for future Geospatial/GIS meetups. Attendees do need to sign up each time, either from the Eventbrite link that can be found in the bottom left corner of the [UCR Library website](#), or by joining the [Geospatial mailing list](#).

Kulkarni asked about where to find out more about geospatial events at UCR. Each quarter, Janet updates the [Geospatial/GIS Quarterly](#) with events and resources of interest to the UCR geospatial community. To check on geospatial resources throughout the University of California, visit the [UC GIS Hub](#).