

Geospatial Web Apps in Python and R - Call for Participants

This workshop aimed at researchers in GIScience who want to learn how to make interactive and visual web apps based on their research. Web apps can provide a powerful method for communicating models and results in an interactive way which is more accessible to the public than publishing code or results in a more traditional way- whilst allowing users to explore different scenarios and possibilities relevant to their own lives. This is particularly important for geospatial data and science, which is inherently connected with people's environments.

Recent development of packages and libraries for R and Python allow for easy design of graphical apps for visualising and interacting with data and models. However, taking the next step to make these publicly available and useful to non-experts can be daunting. This workshop will give researchers who are proficient in Python or R a grounding in the different tools available for designing and creating interactive apps which use scientific models, and teach them how to host them online for use by the public using a toy example prepared by the workshop facilitators. We will also discuss the benefits and challenges of hosting and publishing these apps - as well as the different use cases for these apps.

By the end of the workshop, participants will understand how to take a basic spatial model in either Python or R, build a graphical user interface with 'off the shelf' tools, and host it on a free platform for use by the public. Participants will also have an app to "take home" based on the example provided by the facilitators which they can adapt for their own purposes.

Proficiency in either Python or R is a requirement for this workshop.

Topics Covered:

- Visualisation and interactivity tools in Python and R
- Basic UI design
- App hosting basics