

Abstracts in this session

Open Source Geocoding

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Abstract text: Geocoding turns text addresses ("318 Patterson Ave, Scottdale, GA 30079") into coordinate values (-84.26579, 33.784832). The tools for geocoding are an important part of the geographer's craft. Over time these tools have proliferated and are available as online services, in desktop software and in spatially-enabled databases. Open source geocoding tools are available in all these categories but often aren't well-known. They are interesting because they are open: users can see and understand the mechanics of them and choose the options that are most appropriate for the job at hand.

Some open source geocoders accept user-supplied spatial data and simply calculate coordinates, while others are directly tied to open data sources. Parameters determining fitness for use of any given geocoder includes licensing issues, calculation methodology, and the coverage and consistency of the spatial data used to generate coordinates.

This paper will examine open source geocoders on the desktop, in spatial databases and using online services. It will demonstrate the levels of difficulty associated with each and the assumptions and frameworks on which each was built. Licensing issues and the utility of open data sources will be discussed. The presentation is intended to enable both GIS technicians and managers to evaluate geocoding options available to them.

Developing an Argumentation Platform in an Open Source Stack

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ABSTRACT TEXT: Online argumentation platforms enable groups to share information in a centralized database to gather information related to public works projects, planning and research projects. Argumentation maps provide the ability to link geographic objects to each other using conversational or logical connections. Available argumentation maps have significant technological barriers to use and may not offer features required for data access that have been identified in the literature. The purpose of this research is to create a data model and application architecture in an open source environment for an extensible online argumentation map and to evaluate it as a platform in two naturalistic use cases. The use cases are designed to demonstrate that unassisted users are able to interact with the system as effectively as users who are obligated to use it and are assisted through the process. The two use cases had similar statistics for user participation and content. Some users intuitively connected geographic objects to logical arguments, demonstrating the effectiveness of the data model and user interface. Based on the observed user participation rates and the degree to which users link spatial objects to conversational elements, I conclude that the data model and architecture are successful at providing an online argumentation map platform.