## **Open Requirements for your Professional Toolkit**

If you've ever had to post a public message to a discussion list for help with your research, then you already know the value of having open communication with your peers. There is no question that having an open attitude gets you further ahead - from answering quick questions on Twitter, or sharing your research history on LinkedIn, making connections and solving problems is critical. Access to open geodata - via data clearinghouses or open geospatial specifications - is an increasingly critical component for many research projects but quickly powering much of this access behind-the-scenes, is open source software.

Open source geospatial software serves a key role in both professional and academic research circles. In some venues it is nothing new, in others it is rocking the boat and in yet others it is slowly creeping in. The professional or researcher who ignores open source software cannot serve their own needs as well as those who embrace it. It will become increasingly so, as demand for answers outside of a black box grows and as demand for solutions built on open standards continues. Researchers moving into industry also need a well-rounded professional toolkit, especially in the consulting world.

In this talk, learn more about the important components that you should have as part of your professional toolkit - now and into the future. Today's GIS practitioner needs to tool-up in a number of categories: GIS, databases and web development. Within each category you will learn about several power tools that every analyst should have readily available. Simple command line tools for data management will be introduced as well as introductory examples of working with spatial databases and putting up simple web-based maps. All of the examples will be shown using open source, freely available, software that you can keep in you toolkit long after your research project is completed.