

Workshop: Introducing Geographic Information Systems into the IS Curriculum: GIS Tutorial and Preparation Workshop

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ABSTRACT

The use of geographic information system (GIS) has been growing tremendously in many areas of application. The lowering cost of hardware and software, along with the relative ease of access to data on the internet, in the past two decades also fueled the proliferation. When IS/IT practices in business are eagerly seeking for a competitive edge in the intelligent use of information, GIS skills and technologies offer new ways of using information, such as those in spatial and topological data analysis. It is definitely the time to add GIS courses into the IS curriculum. The past ISECONS include quite a few papers on the subject. This workshop begins with a GIS tutorial, covering the basic use of GIS to spatial data analysis, leading to a glimpse of the range of application areas. The second half of the workshop the discusses what is the needed preparation for an introductory GIS course, from software to lab facilities and data resources and books, leading to a draft account of cost involved in starting and running a GIS course.

The tutorial covers the basics of using GIS. But it also introduces an understanding of its system architecture. We will go through a case study of census data to perform spatial analysis, thus high-lighting the new ways of using information. The tutorial includes these four parts:

- 2.1 Navigating through GIS
- 2.2 Understanding base map and map layers
- 2.3 Getting relevant data from web
- 2.4 Perform spatial analysis

PREPARING FOR GIS COURSE

What do we need to get a GIS course started? We will go through a brief survey of facilities needed, and roughly account for the cost involved. This second half includes these parts:

- 3.1 Survey of GIS software
- 3.2 Lab facilities needs
- 3.3 Data sources available
- 3.4 Books, journals and conferences

CONCLUSION

The workshop will only promote adding GIS courses to the IS curriculum. We hope to whet the appetite of the skeptics, but also help the enthusiastic ones to get started. We intend to show that it is not too costly to get GIS courses started, and the benefits are huge.