

Exploring the place of vagueness in spatial information

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Vagueness is pervasive in spatial concepts and relations. This presents a major obstacle to establishing the spatial and geo-spatial ontologies that will be required for the next generation of semantically aware spatial information systems. This tutorial will examine the many issues and challenges that arise from vagueness in spatial information and explore a variety of approaches to dealing with them (including fuzzy logic, supervaluation semantics and standpoint semantics). The theoretical analysis of vagueness will be applied to the problem of characterising particular types of geographic feature (such as, forest, lake, mountain, etc.). Representation and reasoning about "place" is a second, closely related theme of the tutorial. The notion of "place" is central to human understanding of space and to the interrogation of spatial information. However, its semantics is elusive and controversial. The nature of "place" will be explored from both a logical and a social perspective.

The web page for the tutorial is at:<http://www.comp.leeds.ac.uk/brandon/PlaceOfVagueness>