

Geographical Information Engineering in the 21st Century

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Abstract. This paper discusses the challenges facing GIS designers in the 21st century. We argue that GI engineers lack a sound theoretical basis that would allow them make best use of new technologies that handle geospatial data. Considering three important topics for the new generations of GIS (change, semantics and cognition) we show that GIS theory is in a state of flux. Thus, researchers and engineers need to cooperate more for the new generation of GIS to be built in the best possible way.