

ISTeC



**Colorado
State
University**

The Information Science & Technology Center

ISTeC.ColoState.edu

Colorado State University's Information Science and Technology Center (ISTeC)

presents two lectures by



Dr. Michael F. Goodchild

Professor of Geography
University of California, Santa Barbara

ISTeC Distinguished Lecture

in conjunction with the Computer Science Department Seminar Series

“The Spatial Web: Visions For A Geographically Enabled World”

Monday, December 4, 2006
Lecture: 11:00 a.m. to 12:00 noon
Shepardson room 118

Special Geographic Information Science Lecture
sponsored by ISTE C

“The Fundamental Laws Of Geographic Information Science”

Friday, December 1, 2006
Lecture: 2:00 to 3:00
Shepardson room 102

ABSTRACTS

“The Spatial Web: Visions For A Geographically Enabled World”

The popularization of the Internet and the advent of the Web have had enormous impact on geographic information technologies, making it possible for researchers and the general public to access unprecedented amounts of information through digital libraries, clearinghouses, and geoportals. Google Earth is only one example of a process of technological democratization that has occurred in the past two years. At the same time new positioning technologies have appeared to augment the power of GPS (global positioning systems), including radio-frequency identification (RFID), and disciplines from geophysics to ecology and public health are embracing the power of small, cheap, and powerful sensors to collect real-time data on geographically distributed systems. I sketch a vision of a Spatial Web, in which objects in the world know and report their locations, along with useful information about their surroundings; this information is then collected and compiled by servers, and is redistributed to users. This vision has powerful implications for new kinds of science, for “citizen science”, for surveillance, and for many other areas of human activity. This technological vision must be tempered by the realities of institutions, human behavior, and politics, and by concerns for privacy. Geographers have a pressing responsibility to reflect on these technological developments, and to ensure their effective and responsible use.

“The Fundamental Laws Of Geographic Information Science”

Dr. Goodchild will discuss whether it is possible for the discipline of Geographic Information Science to have general empirical laws -- in other words, are there general properties possessed by all geographic information? Such laws would be useful in designing geographic information technology. I examine Tobler's First Law of Geography, and suggest several additional laws.

SPEAKER BIOGRAPHY

Dr. Michael F. Goodchild (<http://www.geog.ucsb.edu/~good/>) is Professor of Geography at the University of California, Santa Barbara; Chair of the Executive Committee, National Center for Geographic Information and Analysis (NCGIA); Associate Director of the Alexandria Digital Library Project; and Director of NCGIA's Center for Spatially Integrated Social Science. He received his BA degree from Cambridge University in Physics in 1965 and his PhD in Geography from McMaster University in 1969. After 19 years at the University of Western Ontario, he moved to Santa Barbara in 1988. He was Director of NCGIA from 1991 to 1997. He was elected member of the National Academy of Sciences and Foreign Fellow of the Royal Society of Canada in 2002, and member of the American Academy of Arts and Sciences in 2006. He has received honorary doctorates from Laval University (1999), Keele University (2001), McMaster University (2004), and Ryerson University (2004). In 1990 he was given the Canadian Association of Geographers Award for Scholarly Distinction, in 1996 the Association of American Geographers award for Outstanding Scholarship, in 1999 the Canadian Cartographic Association's Award of Distinction for Exceptional Contributions to Cartography, and in 2002 the Educator of the Year Award from the University Consortium for Geographic Information Science. In 2001 he received a Lifetime Achievement Award from Environmental Systems Research Institute, Inc. He was Editor of *Geographical Analysis* between 1987 and 1990 and Editor of the Methods, Models, and Geographic Information Sciences section of the *Annals of the Association of American Geographers* from 2000 to 2006. He serves on the editorial boards of ten other journals and book series.

To arrange a meeting with the speaker, please contact Dr. Denis Dean at (970) 491- 2378or Denis.Dean@ColoState.EDU

ISTeC (Information Science and Technology Center) is a university-wide organization for promoting, facilitating, and enhancing CSU's research, education, and outreach activities pertaining to the design and innovative application of computer, communication, and information systems. For more information please see ISTeC.ColoState.edu.