

Dr. Robert Laurini

Rapid bio sketch



Born in 1947, after being graduated in electronic engineering, Robert Laurini (aka Roberto) holds two doctorates, one called « Docteur-Ingénieur » in 1973, and the other « Docteur-ès-Sciences » in 1980, both in computing awarded by the Claude Bernard University of Lyon, France. He speaks fluently French, English, Italian and Spanish. For more details see www.laurini.net/robert.

He was successively appointed assistant professor, associated professor at INSA-Lyon (National Institute of Applied Sciences), then full professor at Claude Bernard University of Lyon; then he returned as distinguished professor to INSA-Lyon. However, in 76-77 he spent a full year as a research associate at the Martin Centre of the University of Cambridge, UK; and in 86-86 as visiting professor at the University of Maryland, College Park, USA. From 1995 to 2005, he held a part-time position at the IUAV University of Venice, Italy. From 2011, he is in pension and nominated professor emeritus by the Knowledge Systems Institute, Illinois, USA.

During his carrier, he worked overall on computing aspects of geographic information systems, namely spatial data indexing, geometric quality control, geographic database consistency, updating through aerial photos, hypermaps, groupware for urban planning, visual summaries, chore generation, field-oriented databases, telegeomonitoring, geographic ontologies, sensor data organization and indexing, etc. His last works were on geographic knowledge especially for smart cities and territorial intelligence. In total, he supervised or co-supervised 44 PhD students in those domains.

He wrote several books regarding geographic information systems, especially for urban and environmental planning. The three more important are: *“Fundamentals of Spatial Information Systems”* with Derek Thompson in 1793; *“Information Systems for Urban Planning: A Hypermedia Cooperative Approach”* in 2001; and *“Geographic Knowledge Infrastructure: Applications to Territorial Intelligence and Smart Cities”* in 2017. He authored or co-authored more than 250 papers in various journals and conferences.

For ten years, he was head of the LIRIS research laboratory (initially 50 researchers, finally 250 researchers) shared by several Lyon higher institutions; this research center was dedicated to the design of information systems, and image and video processing. He was also vice president of the INSA board of regents.

He was European editor of the journal *“Computers, Environment and Urban Systems”*, associate editor of *“Journal of Visual Languages and Computing”*, head of the steering committee of the ACM conferences of geographic information systems, now transformed into the ACM SIGSPATIAL (Special Interest Group on Spatial Information). He was vice-president of the Urban Data Management Society (www.udms.net). He chaired several conferences on geographic information systems, urban information systems and geographic knowledge for smart cities. Recently, he organized a brainstorm

workshop regarding knowledge management for regional policymaking. He received two awards from ACM, one from JVLC and one from UDMS.

He was invited to give seminars in many countries, especially in Italy, Argentina, and Mexico. He was member of PhD committees more than 100 times in 19 countries.

In 2009, he founded the NGO "*Universitaires Sans Frontières/Academics Without Borders*" the scope of which is to help modernize universities in developing countries. After being president for 12 years, he was appointed Honorary President and editor-in-chief of its bimonthly newsletter(www.usf-awb.org). In this NGO, he is now in charge of several universities in Latin America, especially for the training of PhD students and young researchers for scientific writing, and of lab heads for the definition and validation of promising novel research lines.

Concerning IARIA, he was especially involved in the GeoProcessing conferences; in 2017, he gave a paper entitled "*Towards Smart Urban Planning through Knowledge Infrastructure*". In 2021, he delivered an invited keynote entitled "*An Introduction to Intelligent Geoprocessing*". In the IARIA ComputationWorld & DataSys 2023 Congress, he gave an invited talk entitled "*A Research Agenda on Knowledge Management for Regional Policies*", and was participating to two panels, namely Panel #2 "*Awareness of AI-tools in Education: How to tackle AI-generated fake theses?*" and Panel #5 "*Cognition Challenges in Digital Society: Cognition and Reasoning in Urban Planning*".