The Father of Fuzzy Logic
in
A UW Campus-Wide Distinguished Lecture

Professor Lotfi Zadeh[1]

The University of California at Berkeley
Berkeley, CA, USA

Abstract
Precision carries a cost. This is the main reason why in most of its applications, the machinery of fuzzy logic is employed to exploit the tolerance for imprecision for achieving tractability, robustness and low solution cost. In fact, it is the tolerance for imprecision that underlies the remarkable human capability to perform a wide variety of physical and mental tasks, e.g., drive in city traffic, based solely on perceptions, without any measurements and any computations. It is this capability that motivated the development of fuzzy-logic-based computational theory of perceptions (CTP). Existing theories and, in particular, probability theory, do not have the capability to operate on perception-based information. The computational theory of perceptions is a branch of the fuzzy-logic-based methodology of computing with words and perceptions (CWP). Development of the methodology of computing with words is an important event in the evolution of fuzzy logic. Eventually, it may lead to a radical enlargement of the role of natural languages in information processing, decision, and control.

The Speaker
LOTFI A. ZADEH is a Professor in the Department of EECS, University of California, Berkeley. In addition, he is serving as the Director of BISC (Berkeley Initiative in Soft Computing). He is an alumnus of the University of Teheran, MIT and Columbia University. He held visiting appointments at the Institute for Advanced Study, Princeton, NJ; MIT; IBM Research Laboratory, San Jose, CA; SRI International, Menlo Park, CA; and the Center for the Study of Language and Information, Stanford University. His earlier work was concerned in the main with systems analysis, decision analysis and information systems. His current research is focused on fuzzy logic, computing with words and soft computing, which is a coalition of fuzzy logic, neurocomputing, evolutionary computing, probabilistic computing and parts of machine learning. The guiding principle of soft computing is that, in general, better solutions can be obtained by employing the constituent methodologies of soft computing in combination rather than in stand-alone mode. Lotfi Zadeh is a Fellow of the IEEE, AAAS, ACM, AAAI, and IFSA. He is a recipient of the IEEE Education Medal, the IEEE Richard W. Hamming Medal, the IEEE Medal of Honor, the ASME Rufus Oldenburger Medal, the IEEE Millennium Medal, the ACM 2000 Allen Newell Award, and other awards and honorary doctorates.

Location: *Davis Center Room DC 1350*
Date: *Friday June 13, 2003*
Time: *2pm*

Sponsored by:
KW IEEE Control Systems Chapter, KW IEEE Neural Networks Chapter, and the SDE PAMI Lab

[1] UW Honorary Doctoral Recipient at the June 14 Convocation