
Donald Geman

*Department of Applied Mathematics and Statistics, and
Center for Imaging Science
The Johns Hopkins University
Chair: Joseph A. O'Sullivan*

In Search of a Unifying Theory for Image Interpretation

Image interpretation, which is effortless and instantaneous for human beings, is the grand challenge of computer vision. The dream is to build a “description machine” which produces a rich semantic description of the underlying

SHANNON LECTURER

Rudolf Ahlswede

*University of Bielefeld
Chair: David Neuhoff*

Towards a General Theory of Information Transfer

Rudolf Ahlswede was born in Dielmissen, Germany, on September 15, 1938. He received the Dr. rer. nat. degree in mathematics from Göttingen in 1966. He has held academic positions at Göttingen, Erlangen, and at Ohio State University, Columbus. From 1976 to 2003 he was Professor (Ordinarius) in Bielefeld. Since then he has been Emeritus Professor and pursued research on a General Theory of Information Transfer. He has spent research semesters at Cornell University, the University of Illinois, the University of Heidelberg, the Istituto Nazionale di Alta Matematica (Rome), Stanford University, Renyi Institute (Budapest), and Nankai University (Tianjin, China). His research interests include mathematics, with highest concentration on combinatorics, number theory and information theory. He has authored the book *Suchprobleme* (coauthored by I. Wegener, Teubner 1979). He was also the subject of the book *Numbers, Information and Complexity* (by I. Althöfer, et al., Kluwer 2000), which was devoted to his work on the occasion of his 60th birthday. He has twice received the Best Paper Award of the IEEE Information Theory Society (with Imre Csiszar in 1988 and with Gunter Dueck in 1990). He received a Paul Erdős Monetary Award (with Levon Khachatryan in 1996), the Humboldt-Japan Society Senior Scientist Award (in Tokyo 1998/99), and the Honorary Doctorate of the Russian Academy of Sciences (Moscow, 2001). He became a member of the European Academy of Sciences in Brussels in 2005.