Citation

For enormous contributions to the fundamental research in computer network modeling and performance evaluation, and to their spread and promotion

Dr. Hideo Miyahara

Positions and Organizations :
Past President and Professor Emeritus, Osaka University
Research Director, Asia Pacific Institute of Research
Representative Director, Knowledge Capital Association
External Director, West Japan Railway Company
Outside Director, Osaka Gas Co., Ltd.

Degree : Ph.D. (Osaka University, 1973)

Date of Birth : June 21, 1943

Brief Biography :
1972   Graduated from doctoral program, Graduate School of Engineering, Osaka Univ.
1973   Assistant Professor, Faculty of Engineering, Kyoto Univ.
1980   Assistant Professor, School of Engineering Science, Osaka Univ.
1983   Visiting Researcher, IBM Thomas J. Watson Research Center
1989   Professor, School of Engineering Science, Osaka Univ.
1995   Director, Computation Center, Osaka Univ.
1998   Dean, Graduate School of Engineering Science, Osaka Univ.
2000   Director, International Student Center, Osaka Univ.
2002   Professor and Dean, Graduate School of Information Science and Technology, Osaka Univ.
2003   President, Osaka Univ.
2007   President, Global Environment Centre Foundation
2007   President, National Institute of Information and Communications Technology
2011-   Research Director, Asia Pacific Institute of Research
2012-   Representative Director, Knowledge Capital Association
2013-   Specially Appointed Professor and Currently Invited Professor, Graduate School of Information Science and Technology, Osaka Univ.
2013-   External Director, West Japan Railway Company
2013-   Outside Director, Osaka Gas Co., Ltd.

Main Awards and Honors:
1997   Minister of International Trade and Industry Award
1999   Achievement Award, Institute of Electronics, Information and Communication Engineers (IEICE)
2002   Ericsson Telecommunications Award
2003   Ministry of Internal Affairs and Communications, Commendation
2008   Distinguished Achievement and Contributions Award, IEICE
2013   NHK Broadcasting Culture Award
2015   Kenjiro Takayanagi Award, Kenjiro Takayanagi Foundation

Others
Life Fellow, IEEE
Fellow, Information Processing Society of Japan
Fellow and Honorary Member, IEICE

Main Achievements :

Dr. Hideo Miyahara graduated from the doctoral program at Graduate School of Engineering, Osaka University, in 1972 and obtained his Ph.D. He became a full professor at Computation Center, Osaka University in 1987. Then he also worked as a full professor with School/Graduate School of Engineering Science, and the Graduate School of Information Science and Technology. He also became the dean at those graduate schools, and then appointed as the President of Osaka University in 2003. In 2007, he served as the President of the National Institute of Information and Communications Technology, and is currently the Research Director of the Asia Pacific Institute of Research, a think-tank located in Japan's Kansai area.

At the dawn of the ARPANET project, Dr. Miyahara theoretically proved the superiority of packet switching technology over circuit switching technology on the internet, he established computer network modeling and performance evaluation as academic disciplines, and, by constructing a network design method based on that work, he paved the way for the practical application of computer networks. In addition to showing the ideal form of computer networks as an information and communication infrastructure, Dr. Miyahara was one of the first to focus on the possibility of computer communication as a new means of communication, and he promoted research and development in distributed multimedia applications that effectively utilize computer networks.

In ATM research, he theoretically clarified the effectiveness and scope of application for ATMs as well as greatly contributing to their spread, such as through a proposal for the standardization of a new ATM switch architecture and introducing ATMs to the Osaka University campus LAN.

Rather than sticking to proposals for control methods that result in localized performance improvements, he considered series of research results produced by research activities that comprehensively capture the entire network to be extremely important in showing the form of networks as an indispensable social infrastructure, and had an enormous influence on research activities in this field.

Furthermore, as President of the Institute of Electronics, Information and Communication Engineers and as President of the National Institute of Information and Communications Technology, Dr. Miyahara contributed to the development of network technologies and to the applications of those technologies, and has made great contributions to the spread of current internet technologies.

Additionally, he has made every effort to foster the information processing industry and to promote advanced research and development in the field of information and communications. Even today, he is still committed to nurturing and producing large numbers of researchers who are internationally active on the cutting edge, and he greatly contributes to the development and operation of experimental demonstration networks that are the basis for Japan's information and communication network development activities, to the widespread use of advanced networks rooted in local communities, and to new value creation activities that integrate people, information, technology, and knowledge.

He has received numerous awards for these achievements, including a Commendation from the Ministry of Internal Affairs and Communications, an Achievement Award, a Distinguished Achievement and Contributions Award, and being named a Fellow at academic societies.

In recognition of his enormous contributions to the fundamental research in computer network modeling and performance evaluation, as well as in spreading and promoting them, Dr. Hideo Miyahara is hereby awarded the Okawa Prize.