

Professor John Hopcroft

The degree of Doctor of Engineering (honoris causa) was conferred upon Professor John Hopcroft at the Faculty of Engineering and Information Technologies graduation ceremony held at 11.30am on 16 May 2008.



The Chancellor Her Excellency Professor Marie Bashir AC conferring the honorary degree upon Professor Hopcroft, *photo, copyright Memento Photography.*

Citation

Chancellor, I have the honour to present Professor John Hopcroft for the conferring of the degree of Doctor of Engineering (honoris causa).

John Hopcroft is the IBM Professor of Engineering and Applied Mathematics in Computer Science at Cornell University, USA. From January 1994 until June 2001, he was the Joseph Silbert Dean of Engineering at the same university. After receiving both his MS (1962) and PhD (1964) in Electrical Engineering from Stanford University, he spent three years on the faculty at Princeton University. He joined the Cornell faculty in 1967, was named Professor in 1972 and the Joseph C. Ford Professor of Computer Science in 1985. He served as Chairman of the Department of Computer Science from 1987 to 1992 and was the Associate Dean for college affairs in 1993. An undergraduate alumnus of Seattle University, Hopcroft was honoured with a Doctor of Humanities Degree, Honoris Causa, in 1990.

Hopcroft's research centres on the theoretical aspects of computing, especially analysis of algorithms, automata theory, and graph algorithms. He has published seminal papers and co-authored several books on formal languages and algorithms with Jeffrey D. Ullman and Alfred V Aho. His books are regarded as the classic texts in computer science. His present work is on the study of information capture and access.

He was honoured with the A M Turing Award in 1986 (which is regarded by many as the equivalent to the Nobel Prize for Computer Science) for fundamental achievements in the design and analysis of algorithms and data structures. He is a member of the National Academy of Engineering and a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Institute of Electrical and Electronics Engineers, and the Association of Computing Machinery.

In 1992, he was appointed by the first President Bush to the National Science Board, which oversees the National Science Foundation, and served through May 1998. From 1995–98, Hopcroft served on the National Research Council's Commission on Physical Sciences, Mathematics, and Applications.

In addition to the above appointments, Hopcroft serves as a member of the Scientific Advisory Committee for

the David and Lucile Packard Fellowships in Science and Engineering. In 2005 he was made an honorary fellow of the National College of Ireland where he chaired their international advisory board. Currently he is a member of the World Bank Science Millennium Project in Chile and the Vietnam Education Foundation committee to improve university education.

In summary, in the Computer Science field, Professor John Hopcroft is one of the most important contributors, both in intellectual ideas and in commitment to service, in building the discipline. We are fortunate that Professor Hopcroft has a longstanding relationship with some of the academics in our School of IT and he has been a great supporter and mentor of research projects and ideas here.

Chancellor, I have great pleasure in presenting to you, for admission to the degree of Doctor of Engineering (honoris causa), computer scientist and academic leader, Professor John Hopcroft.