



Awards Luncheon Speaker

John A. N. (JAN) Lee

Professor of Computer Science, Virginia Polytechnic

Member, Center for the Study of Science in Society

Title of Presentation: "The Great Myths of Computer History"

Biographical Sketch:

John A. N. (JAN) Lee has had two major careers - in Civil Engineering and in Computer Science. In the 1950's and 60's he was a practicing, professional civil engineer, serving on the teams which created the designs for the Medway Bridge, just outside London, England, which (still) holds the record for the longest concrete span, the Firth of Forth Road Bridge, which was the first bridge in the world to span a clear mile, and the now well-known Sydney Opera House in Australia. Based in these experiences which involved the use of computers, he initiated computer center and computer classes at Queen's University in Kingston Ontario, and, in cooperation with colleagues from the University of Toronto and Dupont, developed first highly efficient FORTRAN compiling system for IBM 1620 (KINGSTRAN), a system which eventually was modified for the IBM System/360 and named WATFOR. Moving to the USA in 1964 at the University of Massachusetts, he initiated the Computer Science program, was the first department head, and in the meantime developed compiler software for first time-sharing system for CDC machines (BASIC, FORTRAN, APL). He wrote the first US textbook on compiler development - The Anatomy of a Compiler (1967) and first textbook on formal languages Computer Semantics (1971). He moved to Virginia Tech in 1974 to assist in the development of graduate program, and extend the undergraduate program. He has served as the chairman of the Undergraduate Program for many years, and has developed many new courses including "Professionalism in Computing", the WWW site for which is shared by many institutions.

Throughout these academic appointments he represented the Association for Computing Machinery (ACM) on American National Standards Committee X3 for 20 years, leading the development of Numeric Representation and BASIC standards; he participated in the standardization of PL/I, and oversaw standardization of Ada for the Department of Defense. He received a Certificate of Appreciation from the Computer and Business Equipment Manufacturers Association in October 1971, and a Certificate of

Distinguished Service, from the US Department of Defense in October 1983 for his work on the standardization of the programming language Ada. He was designated a "Pioneer of Information Processing Standards", at the 25th Anniversary Meeting of the Accredited Standards Committee X3, in 1986.

Within ACM he served as the Chair or member of the standards committee for over 20 years, was elected as an ACM Council member, and Vice President. He received the ACM Outstanding Contribution Award in 1981, and Certificates of Recognition of Service in 1980, 1985, 1986, and 1989. In 1993 he was named as the recipient of the Distinguished Service Award by the Association for Computing Machinery for his service to ACM and the computer community through his innovative contributions to computing standards, the history of computing, and the development of professionalism. He was named as a Fellow of the Association for Computing Machinery in 1993.

Always interested in history, he served on the organizing committee for the 1978 History of Programming Languages Conference, and, with support from IBM, organized the 1982 25th Anniversary of the programming language FORTRAN. From its inception Dr. Lee served as an Editor and eventually as the Editor-in-Chief of the *Annals of the History of Computing*, and was General Chairman of the 1993 Second History of Programming Languages Conference. Taking over as the Editor-in-Chief of the Annals of the History of Computing in 1987 he turned a near bankrupt activity into a strong on-going project, which is very much akin to a distributed Research Center rather than just a journal. The journal was taken over by the IEEE Computer Society in 1992 and he completed two terms as IEEE Editor-in-Chief in 1996. In 1992 he was appointed as the chair of the International Federation for Information Processing Working Group on the History of Information Processing (WG 9.7) and was the chairman of the IEEE Computer Society History Committee (1992-94). He was the US (FOCUS) Representative to, and secretary of, IFIP Technical Committee 9 (Social Impact of Computers) for six years, and subsequently represented the IEEE Computer Society. He served as chair of the Computer Society Pioneer Award Subcommittee (1992-1999), was a member of the Board of Governors (1995-1997) and was the IEEE Computer Society Vice President for Membership (1995-1996). He is currently the IEEE Computer Society Representative to the IFIP General Assembly.