

# Biographical Description for The HistoryMakers® Video Oral History with Victor Lawrence

PERSON

Lawrence, Victor B.

**Alternative Names:** Victor Lawrence;

**Life Dates:** May 10, 1945-

**Place of Birth:** Accra, Ghana

**Work:** Hoboken, NJ

**Occupations:** Electrical Engineer

## Biographical Note

Electrical engineer Victor B. Lawrence was born in 1945 in Ghana, West Africa. Lawrence attended the Imperial College of Science and Technology at the University of London where he received his B.Sc. degree in 1968, his M.S. degree in 1969, and his Ph.D. degree in 1972, all in electrical engineering.

Upon graduation, Lawrence worked for one year as a development engineer in the United Kingdom and then spent two semesters teaching at Kumasi University of

Science and Technology in Ghana. Lawrence joined Bell Laboratories in 1974 and served as supervisor of AT&T Information Systems Laboratories, department head of Data Communication Research, director of Advanced Multimedia Communications, and vice president of Advanced Communications Technology before his departure in 2005. His application of digital signal processing to data communications in the late 1980s and early 1990s led to many significant advances such as voice-band modems and DSL. Lawrence did the pioneering work and led the development of the “Studio Encoder” and the receiver chip-set for the Sirius Radio Satellite System. Beginning in 1996, Lawrence lectured for several years at the U.S. Industrial College of the Armed Force. As a visiting professor, he taught signal processing and data networking courses at the University of Pennsylvania, Rutgers University, Princeton University, and Columbia University. Lawrence also instructed courses in technology management and technology incubation at Bell Laboratories to new engineers.

In 2005, Lawrence was appointed as the director of the Center for Intelligent Networked Systems, and was named associate dean and Charles Batchler Chair Professor of Engineering at the Stevens Institute of Technology. He has co-authored five books: Introduction to Digital Filters, Tutorials on Modem Communications, Intelligent Broadband Multimedia Networks, Design and Engineering of Intelligent Communications Systems, and The Art of Scientific Innovation. Lawrence holds more than twenty U.S. and international patents and has had more than forty-five papers in referenced journals and conference proceedings, covering the topics of digital signal processing and data communications.

In recognition of his distinguished career, Lawrence was elected as a Fellow into the National Academy of Engineering, the Institute of Electrical and Electronics Engineers (IEEE), and Bell Laboratories. His technical

achievements include the 2004 IEEE Award in International Communication. Lawrence was a co-recipient of the 1984 J. Harry Karp Best Paper Award, the 1981 Gullemmin-Cauer Price Award, and he shared the 1997 Emmy Award for HDTV Grand Alliance Standard with other Bell Laboratories employees. One of the many charitable and educational activities he is involved in is the International Cultural Exchange Center, which he co-founded.

Victor B. Lawrence was interviewed by The HistoryMakers on March 10, 2013.

## Related Entries

**University of London** [STUDENTOF]

[from ? to ?]

**B.S.**

**Imperial College, University of London** [STUDENTOF]

[from ? to ?]

**D.I.C.**

**University of London** [STUDENTOF]

[from ? to ?]

**Ph.D.**

**ITT Research Institute** [EMPLOYEEOF]

[from 1965 to 1980]

**Development Engineer**

**Kumasi University** [EMPLOYEEOF]

[from 1989 to ?]

**Assistant Professor, Dept. of Engineering**

**Bell Laboratories** [EMPLOYEEOF]

[from 1974 to 1979]

**MTS, Research Division**

**Bell Laboratories** [EMPLOYEEOF]

[from 1979 to 1982]

**MTS, Data Communications Division**

**AT&T** [EMPLOYEEOF]

[from 1982 to 1986]

**Supervisor**

**Bell Laboratories** [EMPLOYEEOF]

[from 1986 to 1988]

**Department Head, Digital Techniques  
Department**

**University of California, Berkeley** [EMPLOYEEOF]

[from 1994 to 1997]

**Chancellor's Distinguished Lecture Series**

**IEEE** [EMPLOYEEOF]

[from 1987 to 1987]

**Fellow**

**Bell Laboratories** [EMPLOYEEOF]

[from 1992 to 1992]

**Fellow**

**Bell Laboratories** [EMPLOYEEOF]

[from 1994 to 1994]

**Director, Advanced Multimedia Communication  
Department**

**Bell Laboratories** [EMPLOYEEOF]

[from 1995 to 2005]

**Vice President, Advanced Communications  
Technology**

**United States Industrial College of the Armed Forces**

[EMPLOYEEOF]

[from 1983 to 1984]

**Instructor**

**Stevens Institute of Technology** [EMPLOYEEOF]

[from 1996 to ?]

**Chair Professor & Associate Dean**

**National Academy of Engineering (NAE)** [MEMBEROF]

[from 2003 to ?]

**Member**