BIOGRAPHY

UNITED STATES AIR FORCE

DR. MICHAEL J. HAYDUK

Dr. Michael J. Hayduk is the Deputy Director, Information Directorate, Air Force Research Laboratory, Rome, NY. The directorate's mission is to lead the development and integration of Air Force warfighting information technologies for Command, Control, Communications, Computers, Intelligence, and Cyber. Dr. Hayduk plays a key role in overseeing an annual budget of over 1.6 billion dollars, leading the activities of over 1,200 scientists, engineers, administrative and support personnel. He coordinates AFRL's Quantum Information Science research portfolio spanning seven technical directorates. Dr. Hayduk orchestrated the stand-up of the Innovare Advancement Center, opening an innovation technology hub located just outside of the security perimeter of the Information Directorate. Dr. Hayduk continues to lead the development of strategic partnerships at Innovare.

Prior to his current position, Dr. Hayduk served as the Chief of the Computing and Communications Division, Air Force Research Laboratory, Information Directorate, Rome, New York from 2011 to 2019. The division's mission was to lead the discovery, development and integration of affordable computing, networking and communications technologies for our air, space, and cyberspace forces. Dr. Hayduk defined, planned, budgeted, advocated, managed; and directed the execution of the research program and led all aspects of personnel management within the division.

Dr. Hayduk joined the Air Force through the Palace Knight educational program in 1991 and was assigned to Rome Laboratory. Upon completion of his graduate studies, he served as a research engineer where he developed ultrafast solid state pulsed lasers for optical communication systems. As a team leader, Dr. Hayduk led the development of microwave photonic components and subsystems for use in radio frequency sensors. In 2005, he was named the acting Chief of the Electro-Optic Components Branch in the AFRL Sensors Directorate, Dr. Hayduk developed components and subsystems for advanced radio frequency and electro-optic AF sensor systems. In 2007, he transitioned into the Chief of the Emerging Computing Technology Branch in the AFRL Information Directorate which performed fundamental and exploratory research and development in nanocomputing, quantum computing, computational intelligence, and optical computing for advanced computing architectures. Dr. Hayduk has published more than 50 journal and conference papers and holds one U.S. patent.

EDUCATION

1991 Bachelor of Science, Electrical Engineering, Clarkson University, Potsdam, N.Y.
1993 Master of Science, Electrical Engineering, University of Virginia, Charlottesville
1997 Doctor of Philosophy, Electrical Engineering, Cornell University, Ithaca, N.Y.
2008 Air War College, Air University, Maxwell AFB, Ala., by correspondence

CAREER CHRONOLOGY

1. May 1991–September 1997 Electronics Engineer, Photonic Components Branch, Rome Laboratory, Griffiss Air Force Base, N.Y.
2. October 1997–July 2005, Research Engineer, Photonic Technology Branch, Sensors Directorate, Air Force Research Laboratory, Rome, N.Y.
3. July 2005–February 2007, Acting Chief, Electro-Optic Components Branch, Sensors Directorate, Air Force Research Laboratory, Rome, N.Y.
4. February 2007–August 2011, Chief, Emerging Computing Technology Branch, Information Directorate, Air Force Research Laboratory, Rome, N.Y.
5. August 2011–January 2019, Chief, Computing and Communications Division, Information Directorate, Air Force Research Laboratory, Rome, N.Y.
6. January 2019–Present, Deputy Director, Information Directorate, Air Force Research Laboratory, Rome, N.Y.

MAJOR AWARDS AND DECORATIONS

2006 Mohawk Valley Accent on Excellence Award
2016 Leadership Mohawk Valley-Follow the Leader

OTHER ACHIEVEMENTS

1996 Achievement Award, Electronic Systems Command
1997 Science and Technology Achievement Award, Air Force Materiel Command
2001 Dr. Charles E. Ryan Award for Top Team of the Year, AFRL Sensors Directorate
2001 Outstanding Paper Award, ISA 47th International Instrumentation Symposium
2002 Patent of the Year Award, AFRL Sensors Directorate
2004 Sustained Professional Society Service Award, AFRL Sensors Directorate
2012 Fellow, SPIE–The International Society for Optics and Photonics
2021 International Team Award, AFRL Information Directorate

PUBLICATIONS AND PATENTS

11 refereed journal and 43 conference proceedings
“Photonic Analog-to-Digital Conversion Using Light Absorbers”, U.S. patent number 6,326,910

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS

Armed Forces Communications and Electronics Association
International Society for Optical Engineering
Institute of Electrical and Electronics Engineers
Eta Kappa Nu, Phi Kappa Phi, and Tau Beta Pi Honor Societies

(Current as of May 2023)