

CURRICULUM VITAE



JOHN VINCENT ATANASOFF

Mathematical Physicist, Inventor, Businessman
(October 4, 1903 – June 15, 1995)

In the present year a 105 anniversary of the birth of the famous American scientist from Bulgarian origin **John Vincent Atanasoff** is celebrated. The 1973 decision of the patent suit *Honeywell v. Sperry Rand* named him the inventor of the first automatic electronic digital computer, a special-purpose machine that has come to be called the *Atanasoff-Berry Computer*.

John Atanasoff was born in Hamilton, New York to an electrical engineer and a school teacher. Atanasoff's father, Ivan Atanasoff, was born in 1876 in the village of Boyadzhik, Ottoman Empire (present-day Bulgaria), just before Ivan's own parents died in the April Uprising. In 1889, Ivan Atanasoff immigrated into the United States with his uncle. John Vincent Atanasoff's mother, Iva Lucena Purdy, was a teacher of mathematics.

Atanasoff was raised by his parents in Brewster, Florida. At the age of nine he learned to use a slide rule, followed shortly by the study of logarithms, and subsequently completed high school at Mulberry High School in two years. In 1925, Atanasoff received his bachelor of science degree in electrical engineering from the University of Florida, graduating with straight A's.

He continued his education at Iowa State College and in 1926 earned a master's degree in mathematics. He completed his formal education in 1930 by earning a Ph.D. in theoretical physics from the University of Wisconsin-Madison with his thesis, *The Dielectric Constant of Helium*. Upon completion of his doctorate, Atanasoff accepted an assistant professorship at Iowa State College in mathematics and physics. Further Atanasoff held positions as a teaching professor, a governmental wartime research director, and a corporate research executive before being recognized in the 1970s and 1980s for digital electronic computer research he conducted at Iowa State College in the late 1930s and early 1940s.

Partly due to the drudgery of using the mechanical Monroe calculator, which was the best tool available to him while he was writing his doctoral thesis, Atanasoff began to search for faster methods of computation. At Iowa State, Atanasoff researched the use of slaved Monroe calculators and IBM tabulators for scientific problems. In 1936 he invented an analog calculator for analyzing surface geometry. The fine mechanical tolerance required for good accuracy pushed him to consider digital solutions.



Atanasoff-Berry Computer
at Durham Center, Iowa State
University (1997 replica)

According to Atanasoff, several operative principles of the *Atanasoff-Berry Computer* were conceived by the professor in a flash of insight during the winter of 1937-1938 after a drive to Rock Island, Illinois.

Professional experience

1961-1980	Cybernetics, Inc., Frederick, MD, President
1959-1961	Vice Pres., Atlantic Div
1957-1959	Aerojet General Corp., Frederick, MD Manager, Atlantic Div
1952-1957	The Ordnance Eng. Corp., Frederick, MD Founder, President, Director
1949-1952	Naval Ordnance Lab., Director, Fuse Program
1949	US Army Field Forces, Ft. Monroe, VA, Chief Scientist
1945-1948	Chief, Acoustics Division
1942-1945	US Naval Ordnance Lab., Washington, D.C. Chief, Acoustics Section
1942-1945	Professor in Absenia
1936-1942	Assistant Professor
1930-1936	Iowa State College, Mathematics and Physics Assistant Professor
1929-1930	University of Wisconsin, Mathematics, Instructor
1926-1929	Iowa State College, Mathematics, Graduate Assistant and Instructor,
1925-1926	Gainesville H.S., Teacher, Head of Science Dept.
1920-1921	Phosphate prospector

Honors



Monument to John Atanasoff
in Sofia, Bulgaria

In 1970 John Atanasoff was invited to Bulgaria by the Bulgarian Academy of Sciences, and the Bulgarian Government conferred to him the Cyrille and Methodius Order of Merit First Class. This was his first public recognition, and it was awarded to him three years before similar honors were conferred to him in the United States. The credit for this timely recognition of Atanasoff's achievement should be given to the Bulgarian academicians, Blaghoest Sendov, Ph.D. and Kyrille Boyannov, Ph.D., among others. During his lifetime, the highest honor and recognition awarded to John Vincent Atanasoff, the Father of the Computer, was the National Medal of Science and Technology, conferred to him by George H. W. Bush in 1990.

Other distinctions awarded

1987	Doctor of Science (Honoris Causa) University of Wisconsin-Madison
1986	Coors American Ingenuity Award
1985	Honorary citizen of the city of Yambol, Bulgaria
1985	Holley Medal, American Society of Mechanical Engineers
1985	Foreign Member of the Bulgarian Academy of Sciences
1985	Computing Appreciation Award, EDUCOM
1985	Order of the People's Republic of Bulgaria, First Class
1985	Iowa Governor's Science Medal
1981	Computer Pioneer Medal from the Institute of Electrical and Electronics Engineers
1978	Iowa Inventors Hall of Fame

- 1974 Honorary membership, Society for Computer Medicine
- 1974 Doctor of Science (Honoris Causa) University of Florida
- 1947 Cosmos Club membership
- 1947 Citation, Admiral, Bureau of Ordnance
- 1947 Citation, Seismological Society of America
- 1945 U.S. Navy Distinguished Service Award

Since 2002 the Bulgarian President Georgi Parvanov has constituted an Award of the name of John Atanasoff. The Award “John Atanasoff” has been bestowed every year to young Bulgarian who has significant contribution to development both of computed and information technologies and of information society in Bulgaria.

Out of respect for the name of John Atanasoff, the Union of Automation and Informatics, a nongovernmental, non-profit society of the specialists in the field of automation and informatics in Bulgaria, takes his name - *John Atanasoff Union of Automation and Informatics*.



The Award “John Atanasoff”

The Editorial board of *International Electronic Journal Bioautomation* unanimous subscribes to the opinion of the world-wide famous Bulgarian scientist academician Blaghocest Sendov (20 April 2001):

“The principles of John Atanasoff’s computer, though seemingly outdated today, are the basis of the thousands of millions of computers, without which modern society cannot exist. Every Bulgarian knows and prides in the holy brothers, St. Cyrille and St. Methodius, who created the alphabet of all Slavonic peoples. Similarly, John Atanasoff, a man of Bulgarian extraction, opened the road to the world information society.”

Academician Vasil Sgurev , D.Sc., Ph.D.
President of the *Federation of the Scientific Engineering Unions in Bulgaria*
and Chairman of the *John Atanasoff Union of Automation and Informatics*