Overview of the Collection

Repository: The HistoryMakers® 1900 S. Michigan Avenue Chicago, Illinois 60616
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Creator: Taylor, Valerie

Title: The HistoryMakers® Video Oral History Interview with Valerie Taylor,

Dates: August 14, 2012

Bulk Dates: 2012

Physical Description: 7 MOV HD video files (3:35:26).

Abstract: Computer scientist and engineering professor Valerie Taylor (1963 - ) studies high performance computing, with particular emphasis on the performance analysis and modeling of parallel and distributed applications. Taylor was interviewed by The HistoryMakers® on August 14, 2012, in College Station, Texas. This collection is comprised of the original video footage of the interview.

Identification: A2012_190

Language: The interview and records are in English.

Biographical Note by The HistoryMakers®

Computer scientist and engineering professor Valerie E. Taylor was born on May 24, 1963 to Willie and Ollie Taylor in Chicago, Illinois. She is the youngest of three children – Angela Taylor and Anthony Taylor. She graduated from St. Leo the Great Elementary School in 1977 and Maria High School in 1981. Taylor attended Purdue University where she received her B.S. degree in computer and electrical engineering with highest honors in 1985 and her M.S. degree in electrical engineering in 1986. She continued her education at the University of California at Berkeley where she received her Ph.D. degree in electrical engineering and computer science in 1991.

That same year, Taylor joined the faculty at Northwestern University as an assistant professor of electrical engineering and computer science. She became an associate professor in 1997 and then a full professor in 2002. In 2003, Taylor transferred to Texas A&M University where she was named head of the Department of Computer Science and Engineering and the Stewart & Stevenson Professor. Since 2004, Taylor has been the Royce E. Wisenbaker Professor. She remained department head until 2011, having served two full terms. Her research interests are in high performance computing. She has been supported by the National Science Foundation (NSF) for the “OptiPuter”, “New Approaches to Human Potential Realization through Information Technology Research”, and “Prophecy Infrastructure for Performance Analysis” as well as the National Aeronautics and Space Administration’s (NASA) University Research, Engineering and Technology Institutes (URETI) Program for “Nanoelectronics.” She is funded by NSF to use Prophecy in conjunction with two other tools for the purpose of exploring the performance and power tradeoffs of parallel applications. Taylor is also the Executive Director of the Center for Minorities and People with Disabilities in IT (CMD-IT), a 501(c)(3) non-profit organization.

In 2001, Taylor received the Pathbreaker Award from the Women in Leadership at Northwestern University and the Hewlett Packard Harriet B. Rigas Education Award. The following year, Taylor was named a Young Outstanding Leader by the University of California, Berkeley’s Distinguished Engineering Alumni Society. That
same year, she received the Computing Research Association’s (CRA) A. Nico Habermann. She has also been recognized as a Sigma Xi Distinguished Lecturer and in 2005, Taylor was given the Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science, and Diversifying Computing. Since 2008, Taylor has served on the Board of Directors for the Computing Research Association. In 2012, she received the Texas A&M University Regents Professor Award. Taylor was named an Institute of Electrical and Electronics Engineers Fellow in 2013. Taylor has two children, Jasmin Richard and Theodore Richard.

Valerie Taylor was interviewed by The HistoryMakers on August 14, 2012.

Scope and Content

This life oral history interview with Valerie Taylor was conducted by Larry Crowe, on August 14, 2012, in College Station, Texas, and was recorded on 7 MOV HD video files. Computer scientist and engineering professor Valerie Taylor (1963 - ) studies high performance computing, with particular emphasis on the performance analysis and modeling of parallel and distributed applications.

Restrictions

Restrictions on Access

Restrictions may be applied on a case-by-case basis at the discretion of The HistoryMakers®.

Restrictions on Use

All use of materials and use credits must be pre-approved by The HistoryMakers®. Appropriate credit must be given. Copyright is held by The HistoryMakers®.

Related Material

Information about the administrative functions involved in scheduling, researching, and producing the interview, as well as correspondence with the interview subject is stored electronically both on The HistoryMakers® server and in two databases maintained by The HistoryMakers®, though this information is not included in this finding aid.

Controlled Access Terms

This interview collection is indexed under the following controlled access subject terms.

Persons:

Taylor, Valerie

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:
Finding Aid to The HistoryMakers® Video Oral History with Valerie Taylor

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

Texas A & M University

HistoryMakers® Category:

ScienceMakers

EducationMakers

Administrative Information

Custodial History

Interview footage was recorded by The HistoryMakers®. All rights to the interview have been transferred to The HistoryMakers® by the interview subject through a signed interview release form. Signed interview release forms have been deposited with Jenner & Block, LLP, Chicago.

Preferred Citation


Processing Information

This interview collection was processed and encoded on 7/19/2013 by The HistoryMakers® staff. The finding aid was created adhering to the following standards: DACS, AACR2, and the Oral History Cataloging Manual (Matters 1995).

Other Finding Aid

A Microsoft Access contact database and a FileMaker Pro tracking database, both maintained by The HistoryMakers®, keep track of the administrative functions involved in scheduling, researching, and producing the interview.

Detailed Description of the Collection
Finding Aid to The HistoryMakers ® Video Oral History with Valerie Taylor

**Series I: Original Interview Footage, August 14, 2012**

**Video Oral History Interview with Valerie Taylor, Section A2012_190_001_001**, TRT: 1:29:46
2012/08/14

Valerie Taylor talks about her family background and her experiences growing up in the North and the South. Her mother, Ollie Mae Thompson Taylor, was born in September of 1937 in Tallahassee, Florida. Although her mother had a great relationship with her father, Taylor and her siblings never met their grandfather. During her high school years, she played basketball and was devoted to her education. After graduating high school, she went on to earn her B.S. and master’s degrees, both in early childhood education. She is currently retired from the Chicago Public School system. Taylor’s father, Willie James Taylor, was born in September of 1932 in Centerville, Mississippi. After his parents’ deaths during his adolescence, he was adopted by his Uncle Alec and Aunt Angeline Chapman— who Taylor knew as her paternal grandparents.

African American families—Southern States.
African American mothers.
Parents--Death.
Adopted children--Family relationships--United States.

**Video Oral History Interview with Valerie Taylor, Section A2012_190_001_002**, TRT: 2:32:16
2012/08/14

Valerie Taylor is the youngest of three children. She grew up in a three flat apartment building on the South Side of Chicago, Illinois. Taylor talks about her childhood home and neighborhoods. She attended St. Leo the Great Elementary School and she enjoyed math because of its consistent objectivity. Her interest in science was influenced by her father, Willie James Taylor, who was a musician in high school and considered having a career as a musician before he pursued electrical engineering. After graduating from the Illinois Institute of Technology, he founded a company called Sonicraft, where he worked until his retirement.

Childhood and youth--Chicago--Illinois.
Fathers--Employment--Illinois.
Engineering--Vocational guidance--Illinois.
African American business enterprises--Illinois--Chicago.

**Video Oral History Interview with Valerie Taylor, Section A2012_190_001_003**, TRT: 3:29:12
2012/08/14

Valerie Taylor developed an interest in technology through exposure to her father’s engineering company, Sonicraft. As a young girl, Taylor watched her father at work building speakers and other technical equipment on the weekends. By the time she was sixteen years old, Taylor began working at her father’s company during the summers. Although she loved technology, her family did not always have the latest devices. For example, although color television was introduced to the market in the 1950s, her family did not own a color television until 1977. Taylor attended Maria High School in Marquette Park, Illinois. While she did well academically and enjoyed her overall experience there, she did encounter incidences of racism. Taylor talks about the racial climate of Chicago, the politics between parochial and public schools, and her experience at Maria High School.

Engineering--Vocational guidance--Illinois.
African American fathers--Illinois.
Color television.
Valerie Taylor graduated from Maria High School within the top five students of her class in 1981. After participating in the Minority Introduction to Engineering (MIE) Program at Purdue University and enjoying the social atmosphere, she decided to pursue her B.S. degree there. Taylor immediately became involved in the National Society of Black Engineers, which was founded at Purdue University in 1975. After completing her B.S. degree in computer and electrical engineering in 1985, Taylor continued studying for her M.S. degree in electrical engineering at Purdue, which she received in 1986. Although she received a job offer from Lockheed Martin in Los Angeles, California, Taylor decided to continue with her doctoral studies at the University of California at Berkeley on a fellowship from the National Science Foundation.

Valerie Taylor received her B.S. and M.S. degrees in computer and electrical engineering from Purdue University in 1985 and 1986, respectively. She then went on to pursue her Ph.D. degree at the University of California at Berkeley, where she was a member of the Black Engineering and Science Students’ Association. Under the tutelage of David G. Messerschmitt, whose research is in the area of digital communications, Taylor’s research focused on parallel processing and finite element analysis. The aim of her research is to develop and discover ways to make communication between machines or other electronic hardware function more efficiently. After earning her Ph.D. degree in electrical engineering and computer science in 1991, Taylor joined the Department of Electrical and Computer Engineering at Northwestern University as an assistant professor. In 1993, she was awarded the National Science Foundation Investigator award for her research in parallel processing.

Valerie Taylor joined the electrical engineering and computer science department at Northwestern University in 1991. She was promoted to associate professor in 1997 and continued her research in the area of parallel processing, particularly working with performance analysis of parallel applications. In 1999, Taylor received a grant from the National Science Foundation to fund Prophesy, a database used to collect and analyze data to predict the performance of different applications on parallel systems. Taylor talks about her
other grant funded research projects and program developments, as well as her professional awards.

Northwestern University (Evanston, Ill.). McCormick School of Engineering and Applied Science. Department of Electrical and Computer Engineering.

Parallel processing (Electronic computers)--Scientific applications.

National Science Foundation (U.S.)--Research grants.

Performance--Data processing.

Minorities--Education--United States.

Video Oral History Interview with Valerie Taylor, Section A2012_190_001_007, TRT: 7:32:39 2012/08/14

Valerie Taylor was appointed to chair the Department of Computer Science and Engineering, as well as the Stewart & Stevenson Professor, at Texas A&M University in College Station, Texas in 2003. In 2004, she became the Royce E. Wisenbaker Professor. Taylor has received numerous awards for her research, outreach activities, and programmatic developments, including the Richard A. Tapia Achievement Award and the Nico Haberman Award from the Computing Research Association, where she also served on the Board of Directors. Taylor talks about her family, her hopes and concerns for the African American community, and reflects on her career and how she would like to be remembered.

Texas A & M University. Department of Computer Science and Engineering--Faculty.

Engineers--United States--Intellectual life--20th century.

Outreach programs in higher education--United States.

African American families.

African American single mothers.