

# Finding Aid to The HistoryMakers® Video Oral History with Andrew Williams

---

## Overview of the Collection

<b>Repository:</b>	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
<b>Creator:</b>	Williams, Andrew B.
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Andrew Williams,
<b>Dates:</b>	April 6, 2013
<b>Bulk Dates:</b>	2013
<b>Physical Description:</b>	9 uncompressed MOV digital video files (4:24:50).
<b>Abstract:</b>	Electrical engineer Andrew Williams (1964 - ) the first African American to graduate from the University of Kansas with a Ph.D. degree in electrical engineering and founder of the SpelBots, the first African American women's team to compete in the International RoboCup Championships. He is also the John P. Raynor Distinguished Chair of Electrical & Computer Engineering at Marquette University. Williams was interviewed by The HistoryMakers® on April 6, 2013, in Milwaukee, Wisconsin. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2013_107
<b>Language:</b>	The interview and records are in English.

---

## Biographical Note by The HistoryMakers®

Electrical and computer engineer Andrew B. Williams was born in Junction City, Kansas to parents John M. Williams and Yuson Kim Williams. After receiving his B.S. degree in electrical engineering from the University of Kansas in 1988, Williams worked briefly in engineering. He then enrolled in Marquette University and graduated from there in 1995 with his M.S. degree in electrical and computer engineering. Williams was awarded a GEM doctoral fellowship to attend the University of Kansas where he went on to earn his Ph.D. degree in electrical engineering with an emphasis on artificial intelligence (AI) in 1999. He was the first African American to graduate from the University of Kansas with a Ph.D. degree in electrical engineering.

In 1999, Williams was appointed as an assistant professor in the electrical and computer engineering department at the University of Iowa where he started RAMP-IT, a computer and robotics day camp for underrepresented students. After arriving at Spelman College in 2004 as an assistant professor in the computer and information sciences department, Williams founded the SpelBots, the first African American women's competitive robotics team to compete in the international RoboCup. In 2005, his team successfully competed in the RoboCup U.S. Open and qualified for the International RoboCup championship in Osaka, Japan. Williams took a sabbatical from Spelman College in 2008 when Apple, Inc. Co-Founder and CEO Steve Jobs appointed him as Apple's first senior engineering diversity manager. Williams returned to Spelman College from 2010 to 2012 to serve as chair of its computer and information science department. He also served as the primary co-founder on several other projects in order to broaden participation for minorities in STEM education, such as the Advancing Robotics Technology for Societal Impact (ARTSI) alliance, the Advancing Spelman's Participation in Informatics Research and Education (ASPIRE) project, and the Computer and Robotics for African American Students (CARE) project. Williams' book, *Out of the Box: Building Robots, Transforming Lives* (2009), chronicles his work in STEM education. In 2012, Williams was appointed as a tenured full professor and the John P. Raynor, S.J., Distinguished

Chair of Electrical & Computer Engineering at Marquette University. He also became the founding director of Marquette University's Humanoid Engineering & Intelligent Robotics (HEIR) Laboratory.

Williams and his SpelBots have been featured in media publications and outlets such as CNN American Morning, CBS Evening News, Black Enterprise magazine, JET magazine *Ebony* magazine, the *Atlanta Journal Constitution*, and the *Atlanta Daily World*. Not only was Williams individually recognized by *Black Money* magazine as one of the "50 Most Important African Americans in Technology" in 2010, 2011, and 2012, but he is also received the GEM Consortium Alumni Mentoring Award and the Marquette University Young Engineering Alumni Award. Williams and his wife, Anitra Williams, have three children: John Williams, Adrianna Williams, and Rosa Williams.

Andrew B. Williams was interviewed by *The HistoryMakers* on April 9, 2013.

---

## Scope and Content

This life oral history interview with Andrew Williams was conducted by Larry Crowe on April 6, 2013, in Milwaukee, Wisconsin, and was recorded on 9 uncompressed MOV digital video files. Electrical engineer Andrew Williams (1964 - ) the first African American to graduate from the University of Kansas with a Ph.D. degree in electrical engineering and founder of the SpelBots, the first African American women's team to compete in the International RoboCup Championships. He is also the John P. Raynor Distinguished Chair of Electrical & Computer Engineering at Marquette University.

---

## 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:

Williams, Andrew B.

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

## Subjects:

African Americans--Interviews  
Williams, Andrew B.--Interviews

---

## Organizations:

HistoryMakers® (Video oral history collection)

---

The HistoryMakers® African American Video Oral History Collection

---

Spelman College

---

## Occupations:

Electrical Engineer

---

## HistoryMakers® Category:

ScienceMakers

---

## 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

The HistoryMakers® Video Oral History Interview with Andrew Williams, April 6, 2013. The HistoryMakers® African American Video Oral History Collection, 1900 S. Michigan Avenue, Chicago, Illinois.

### Processing Information

This interview collection was processed and encoded on 5/30/2023 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

## Series I: Original Interview Footage

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_001, TRT: 1:30:45 ?

Andrew Williams talks about his mother's family background. His mother, Yuson Kim Williams, was born in 1929 in Chejudo, South Korea. She lived through the Japanese occupation of Korea in World War II. She escaped a forced march by asking to go to the bathroom and then running away. Williams describes his father's family history. His grandfather, George Albany Williams, was born in 1864 as a slave in Culpepper, Virginia. His father was born December 25, 1917 in Ansonia, Connecticut. His father grew up during the Great Depression and worked in the Civilian Corps. He later joined the U.S. Army and met Williams' mother while in Korea during the Korean War. After the Korean War, Williams' father brought his mother and his siblings to the United States. After he was honorably discharged William's father worked as a plumber.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_002, TRT: 2:30:41 ?

Andrew Williams talks about the sixteen year gap in the age of his parents, John Morgan Williams and Yuson Kim Williams, and their deaths in 2009 and 1996 respectively. He describes his parents' personalities and who he takes after, mentioning his appreciation of both his African American and Asian identities. Williams grew up poor in Junction City, Kansas, which was near Fort Riley. When Williams was young, he slept in a cardboard box because there were not enough beds for his family. Although Junction City was infamous for its crime, Williams appreciated the diversity of the community. His parents were very supportive of William's and his siblings' education. Williams also talks about his siblings' education and the importance of their support in his own education.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_003, TRT: 3:29:01 ?

Andrew Williams talks about the racial discrimination he faced in Junction City, Kansas. He recalls his family joining the Free Methodist Church and how his father, John Morgan Williams, was reluctant to let them attend. His father had a

strained relationship with his relatives because of his interracial marriage with his mother, Yuson Kim Williams. Williams talks about Junction City Elementary School and his home science experiments. His first experience with computers occurred during a visit with his brother Morgan in 1997 at University of Kansas in Lawrence, Kansas. In 1982, Williams obtained his first computer, an Atari 400. Williams talks about his skill in basketball during high school and college as well as his decision to pursue engineering.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_004, TRT: 4:31:07 ?

Andrew Williams talks about his high school math courses and his extracurricular activities. Williams decided to attend the University of Kansas in Lawrence, Kansas in 1983 for his B.S. degree in electrical engineering. Neither of his parents had attended college so Williams did not have the counseling or support he needed during the college application process. He shares the importance of the support of the Student Counsel for Recruiting, Motivating, Educating Black Engineers during his time at the University of Kansas. Williams explains why it took him five years to graduate from the undergraduate electrical engineering program and talks about his mentors at the University of Kansas.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_005, TRT: 5:30:57 ?

Andrew Williams discusses his mission trip to Cochabamba, Bolivia after obtaining his B.S. degree in electrical engineering from the University of Kansas in Lawrence, Kansas. He then worked as a Purchase Material Quality Engineer with Allied Signal Aerospace Company, visiting source companies and examining the processes for non-nuclear components of nuclear weapons. In 1991, Williams left Allied Signal Aerospace Company to pursue a M.S. degree from the University of Kansas. After being hired by General Electric in 1992, Williams transferred to Marquette University in Milwaukee, Wisconsin, where he received his M.S. degree in engineering. Williams describes why he decided to pursue a Ph.D. degree at the University of Kansas. He also talks about the difficulty he faced in pursuing his Ph.D. degree, particularly the death of his mother, Yuson Kim Williams, in 1996.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_006, TRT: 6:30:37

?

Andrew Williams describes his doctoral research, 'Learning Ontologies in a Multi-agent System,' where he developed algorithms for machine learning techniques and communication between software agents. Williams was the first African American to receive a Ph.D. degree in electrical engineering from the University of Kansas, receiving his degree in 1999. Williams was a professor at the University of Iowa in Iowa City, Iowa from 1999 to 2004. While at the University of Iowa, Williams collaborated with the medical faculty to create Eye Docs, a software system that categorized symptoms for age-related macular degeneration. Since then Williams has shifted his research from software systems to artificial intelligence in robotics. Williams also talks about the relationship between science and religion.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_007, TRT: 7:31:49  
?

Andrew Williams describes the influence that his research at the University of Iowa in Iowa City, Iowa had on the medical field. Williams discusses why he decided to leave the University of Iowa in 2004 to teach and mentor students at Spelman College in Atlanta, Georgia. He describes forming a robotics team at Spelman, the Spelbots, and competing at Robocup. The team's first competition was the 2005 Robocup U.S. Open, where they qualified for and competed in the 2005 International Robocup. He also describes the Spelbots' championship tie in the 2009 Robocup Japan Open and the difficulty in getting recognition for the all-women African American team.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_008, TRT: 8:28:27  
?

Andrew Williams talks about the discrimination Spelbots, the Spelman College robotics team, faced in Bremen, Germany. Williams was involved in many STEM (science, technology, engineering, mathematics) initiatives in addition to Spelbots, such as the ARTSI (Advancing Robotics Technology for Social Impact) Alliance and ASPIRE (Advancing Spelman's Participation in Informatics Research and Education). Williams met Steve Jobs, the founder of Apple Inc., in 2007 and was hired as Apple's first Senior Engineering Diversity Manager, which resulted in him taking a sabbatical from Spelman College from 2008-2009. Williams wrote his memoir, 'Out of the Box: Building Robots, Transforming Lives' in 2009. Williams explains why he left Spelman College in 2012 to become a professor at Marquette University in Milwaukee, Wisconsin.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Video Oral History Interview with Andrew Williams, Section A2013\_107\_001\_009, TRT: 9:21:26  
?

Andrew Williams describes his research on humanoid robotics, which includes creating teenager sized robots and a robotic health coach. He discusses the need for underrepresented engineers in the field. Williams talks about his wife, who he married in 1992, and his children. Williams reflects upon his legacy as the students he has taught and inspired in computer science and engineering. He also states that he would like to be remembered as a positive role model.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.

Affirmative action programs.