# Overview of the Collection

<table>
<thead>
<tr>
<th>Repository:</th>
<th>The HistoryMakers® 1900 S. Michigan Avenue Chicago, Illinois 60616 <a href="mailto:info@thehistorymakers.com">info@thehistorymakers.com</a> <a href="http://www.thehistorymakers.com">www.thehistorymakers.com</a></th>
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</thead>
<tbody>
<tr>
<td>Creator:</td>
<td>Williams, Andrew B., 1964-</td>
</tr>
<tr>
<td>Title:</td>
<td>The HistoryMakers® Video Oral History Interview with Andrew Williams,</td>
</tr>
<tr>
<td>Dates:</td>
<td>April 6, 2013</td>
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<tr>
<td>Bulk Dates:</td>
<td>2013</td>
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<tr>
<td>Physical Description:</td>
<td>9 uncompressed MOV digital video files (4:24:50).</td>
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<tr>
<td>Abstract:</td>
<td>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 &amp; 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.</td>
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<tr>
<td>Identification:</td>
<td>A2013_107</td>
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<td>Language:</td>
<td>The interview and records are in English.</td>
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## 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

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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., 1964-
Crowe, Larry (Interviewer)
Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews
Williams, Andrew B., 1964---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
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 2/5/2020 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 2013/04/06

Andrew Williams talks about his mother’s, Yuson Kim Williams, family background and her time in South Korea during the Japanese occupation in World War II. He describes how she escaped a forced march by asking to go to the bathroom and then running. Williams describes his father, John Morgan Williams, and his family’s history. He talks about his father growing up in the Great Depression and his work in the Civilian Corps. Williams talks about his father’s time in the Army and his work as a plumber after he was honorably discharged. Williams also recalls
how his parents met and how his father brought his mother and his siblings back to the United States from South Korea.

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Video Oral History Interview with Andrew Williams, Section A2013_107_001_002, TRT: 2:30:41 2013/04/06

Andrew Williams talks about the sixteen year gap in the age of his parents, John Morgan Williams and Yuson Kim Williams. He describes his parents’ personalities and who he takes after, mentioning his appreciation of both his African American and Asian identities. Williams talks about growing up poor in Junction City, Kansas, and how when he was young his mother slept in a cardboard box because there were not enough beds. He describes what Junction City, Kansas was like as he was growing up. He describes his parents’ dedication to their children’s education. Williams also talks about his siblings’ education and the importance of their support in his own education.

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Video Oral History Interview with Andrew Williams, Section A2013_107_001_003, TRT: 3:29:01 2013/04/06

Andrew Williams talks about racism in Kansas, sharing how as a child he was not allowed to use restrooms in the library or stores. He recalls his family joining the Free Methodist Church and how his father, John Morgan Williams, was at first reluctant to let them attend. He describes the strained relationship between his father and his relatives because of his father’s interracial relationship. Williams talks about Junction City Elementary School and
his home science experiments. He describes his first experience with computers while visiting his brother Morgan at University of Kansas in Lawrence, Kansas as well as the first computer, an Atari 400, he obtained. Williams talks about his skill in basketball and his decision to pursue engineering.

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Video Oral History Interview with Andrew Williams, Section A2013_107_001_004, TRT: 4:31:07 2013/04/06

Andrew Williams talks about his high school math courses and his extracurricular activities. He describes his decision to attend the University of Kansas, Lawrence, Kansas in 1983 for 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.

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Video Oral History Interview with Andrew Williams, Section A2013_107_001_005, TRT: 5:30:57 2013/04/06

Andrew Williams discusses the mission trip to Cochabamba, Bolivia he attended immediately 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 looking at 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, 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.

Andrew Williams describes his doctoral research, ‘Learning Ontologies in a Multi-agent System,’ which was related to artificial intelligence software. Williams received his Ph.D. degree in 1999, being the first African American to receive a Ph.D. degree in electrical engineering from the University of Kansas, Lawrence, Kansas. He became a professor at the University of Iowa, Iowa City, Iowa in 1999 and collaborated with the medical faculty to create Eye Docs, a system that categorized symptoms for age-related macular degeneration. Williams also talks about George Washington Carver and revelation in his research.
Andrew Williams describes the influence that his research at the University of Iowa, Iowa City, Iowa had on the medical field. Williams discusses why he decided to leave the University of Iowa 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 and they qualified for and competed in the 2005 International Robocup. He also describes Spelbots’ championship tie in the 2009 Robocup Japan Open and the difficulty in getting recognition for the all-women African American team.

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Andrew Williams talks the STEM initiatives he was involved in at Spelman College, Atlanta, Georgia, including Spelbots, the college’s robotics team, the ARTSI (Advancing Robotics Technology for Social Impact) Alliance, and ASPIRE (Advancing Spelman’s Participation in Informatics Research and Education). He met Steve Jobs in 2007 and was hired as Apple’s first Senior Engineering Diversity Manager, for which he took a sabbatical from Spelman College from 2008-2009. In 2009 Williams wrote his memoir, ‘Out of the Box: Building Robots, Transforming Lives.’ Williams explains why he left Spelman College in 2012 to become a professor at Marquette University, Milwaukee, Wisconsin.

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Andrew Williams describes his current research on humanoid robotics, which includes creating teenager sized robots and a robotic health coach. Williams reflects that his legacy is 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. Williams talks about his family.

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