Finding Aid to The HistoryMakers ® Video Oral History with James McLurkin

Overview of the Collection

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

info@thehistorymakers.com www.thehistorymakers.com

Creator: McLurkin, James (James Dwight), 1972-

Title: The HistoryMakers® Video Oral History Interview with James McLurkin,

Dates: February 4, 2013

Bulk Dates: 2013

Physical Description: 7 uncompressed MOV digital video files (3:34:46).

Abstract: Robotics engineer James McLurkin (1972 -) is an award-winning robotics engineer and

creator of "SwarmBots." McLurkin was interviewed by The HistoryMakers® on February 4, 2013, in Houston, Texas. This collection is comprised of the original video

footage of the interview.

Identification: A2013 024

Language: The interview and records are in English.

Biographical Note by The HistoryMakers®

Robotics engineer James McLurkin was born in 1972 in Baldwin, New York. His mother was a speech therapist on Long Island; and, his father, a business manager for AT&T. In 1988, McLurkin built his first robot, Rover, and quickly followed it with many other designs such as LEGO bricks. He also programed self-designed video games. Following graduation from Baldwin High School, McLurkin enrolled at Massachusetts Institute of Technology where he received his B.S. degree in electrical engineering with a minor in mechanical engineering in 1995. McLurkin continued his studies at the University of California, Berkeley, and graduated in 1999 with his M.S. in electrical engineering. He returned to MIT and went on to receive his M.S. degree in computer science in 2003, and his Ph.D. in computer science in 2008.

McLurkin worked as an intern at General Motors Advanced Technology Group in 1994, and remained there until he entered graduate school. From 1995 to 1997, he was assigned as research assistant to Dr. Rodney Brooks at the MIT Computer Science and Artificial Intelligence Laboratory. There, McLurkin designed the "Robotic Ants" robots for his undergraduate thesis. He then began consulting in 1998, and worked on projects with Walt Disney Imagineering and iRobot Corporation. McLurkin created the "SwarmBots" robots during his five-year tenure as lead research scientist at iRobo. In 2009, McLurkin was appointed assistant professor at Rice University. Using nature as a model, McLurkin's core research has centered around developing distributed algorithms for multi-robot systems – the software for large swarms of autonomous robots. McLurkin's research articles have been published in academic journals such as *International Foundation for Autonomous Agents and Multiagent Systems*, *International Symposium on Experimental Robotics* and *IEEE Transactions on Education*.

Since 1995, McLurkin has has been asked to speak at Smithsonian Museum, Harvard University, Infosys, IBM, and Honda. In 2002, Mclurkin was featured in the Lemelson Center's traveling exhibit, "Invention at Play"," and was awarded the 2003 Lemelson MIT Student Prize. He was recognized by *Time* magazine as one of America's top-five engineers in the "Rise of the Machines" feature, and by *Black Enterprise* magazine as the Best and Brightest Under 40."

James McLurkin was interviewed by *The HistoryMakers* on February 3, 2013

Scope and Content

This life oral history interview with James McLurkin was conducted by Larry Crowe on February 4, 2013, in Houston, Texas, and was recorded on 7 uncompressed MOV digital video files. Robotics engineer James McLurkin (1972 -) is an award-winning robotics engineer and creator of "SwarmBots."

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:

McLurkin, James (James Dwight), 1972-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews McLurkin, James (James Dwight), 1972- --Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

Occupations:

Robotics 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 James McLurkin, February 4, 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 James McLurkin, Section A2013_024_001_001, TRT: 1:30:55?

James McLurkin was born in 1972 in Queens, New York. His mother, Sandra Carlesia Lawson, was born in 1944 and was raised in Columbus, Ohio. She was a school teacher. Her father, Walter Lawson, was a Tuskegee Airman. Sandra Lawson attended Hampton University and eventually became a speech therapist. McLurkin's father, James Dwight McLurkin III, was born in Chester, South Carolina in 1941. He also attended Hampton University and graduated with his

B.S. degree in electrical engineering in 1963. James McLurkin has several doctors and lawyers on both sides of his family, and is the fourth generation of his family to attend college.

African American families.

Hampton University (Va.).

United States--Army Air Forces--Participation, African American.

African American parents--Education.

Video Oral History Interview with James McLurkin, Section A2013_024_001_002, TRT: 2:29:39?

James McLurkin is the son of Sandra Carlesia Lawton and James McLurkin III. James McLurkin III was born in Chester, South Carolina, and worked a variety of jobs in his youth. He had a particular skill with electronics, and decided to pursue a B.S. degree in electrical engineering. James McLurkin III met Sandra Carlesia Lawton at Hampton University, and the two married after graduation. Unfortunately, they divorced when James McLurkin was a young child. After their divorce, McLurkin and his mother moved several times, but McLurkin still saw his father on a regular basis. McLurkin was raised primarily by his mother, who made thoughtful toy purchases based on his interest in electronics and building things. He has memories of playing with Legos, Erector sets, a toolkit, and a woodworking set. Like his father, McLurkin demonstrated a talent for tinkering and building things.

African American fathers.

African American college students--Marriage.

Children of divorced parents--Family relationships--United States.

African American single mothers.

Toys.

Video Oral History Interview with James McLurkin, Section A2013_024_001_003, TRT: 3:31:00?

James McLurkin was a very strong student and made very good grades. Though he performed well, he did not enjoy school because he was not being challenged. As a child, McLurkin spent time reading and building models. His cousin, Roy, was a big influence in his life, and introduced him to computers and video games. McLurkin soon began to program computers. McLurkin was also interested in biking, and would ride for miles to find locations for his stunt practice. He had a BMX bike that he took great pride in customizing. McLurkin remembers one teacher, Dr. Eugene Warasilla, as being instrumental in his life. It was Dr. Warasilla who encouraged his interest in building robots. This enabled McLurkin to pursue his interest in robotics in an academic setting.

African American students--Academic achievement.

Computer programming.

Bicycles and bicycling.

Mentoring in education.

Robotics--Study and teaching--United States.

Video Oral History Interview with James McLurkin, Section A2013 024 001 004, TRT: 4:30:13?

James McLurkin attended Baldwin Junior High School, where he excelled academically, but struggled to be accepted socially. McLurkin then attended Baldwin High School, where he took mostly honors classes. McLurkin honed his skills during this time by building a robot under the direction of his biology teacher, Dr. Eugene Warasilla. He also built a laptop computer under the direction of his shop teacher, Ernie Sabilla, which won the science fair hosted by the National Association for the Advancement of Colored People (NAACP). In

1990, McLurkin graduated from Baldwin High School, and enrolled at Massachusetts Institute of Technology (MIT), where he found intellectual stimulation and social acceptance.

African American high school students.

Robotics--Study and teaching (Secondary)--United States.

Mentoring in education.

National Association for the Advancement of Colored People--Science fairs.

Massachusetts Institute of Technology.

Video Oral History Interview with James McLurkin, Section A2013_024_001_005, TRT: 5:29:27?

James McLurkin enrolled at Massachusetts Institute of Technology (MIT) in 1990, where he was surrounded by a supportive community, including a strong Black Student Union (BSU). While at MIT, he volunteered at a robotics lab, in exchange for parts to build his own robots. His first robot, CLEO, was built to successfully drive through a maze. He was also befriended and mentored by Dr. Anita Flynn, who has a similar interest in small robots. Upon graduating, McLurkin stayed at MIT and worked in Rodney Brooks' lab. Realizing that he needed an advanced degree to further his career in robotics, McLurkin went to the University of California, Berkeley to pursue his M.S. degree. In 1999, McLurkin went to work for the robotics manufacturer, iRobot, but returned to MIT in 2002. McLurkin describes his overall experience as a student at MIT, and the media's recognition of his work in robotics. He also talks about meeting his wife, Adar.

African American college students--Massachusetts--Cambridge.

Robotics--Study and teaching (Higher)--United States.

Flynn, Anita M.

Brooks, Rodney Allen.

Massachusetts Institute of Technology. Artificial Intelligence Laboratory.

Video Oral History Interview with James McLurkin, Section A2013 024 001 006, TRT: 6:29:29?

James McLurkin attended Massachusetts Institute of Technology for his doctoral studies, and graduated with his Ph.D. degree in computer science in 2008. He completed his doctoral research under the direction of Dr. Leslie Kaelbling, where his research focused on the relationships between communication, accuracy, and mobility in computing. Upon graduation, MccLurkin went to the University of Washington to complete his post-doctoral work under the direction of Dieter Fox, who worked on models of artificial intelligence. In 2009, McLurkin joined the faculty of Rice University, where he teaches and conducts research. Some of McLurkin's research focuses on multi-robot systems. McLurkin draws inspiration from many sources, including nature. His studies on his pet ants to examine how they communicate and make decisions, has informed his approach to robotics.

African Americans--Doctoral students--Massachusetts--Cambridge.

Kaelbling, Leslie Pack.

Fox, Dieter.

Rice University--Faculty.

Artificial intelligence--Research.

Video Oral History Interview with James McLurkin, Section A2013 024 001 007, TRT: 7:34:03?

James McLurkin is a robotics engineer, and his research includes multi-robot computations and dynamic task management. McLurkin believes that robots will play a big part in our future, especially in construction, mapping, and

surveillance. As he reflects on his career, he wishes that he had approached his post-doctoral experience differently in order to maximize his research. McLurkin is concerned that there is not enough computer education in the African American community, and feels that it is important for him to help students succeed. He would like to be remembered as a kind, helpful and compassionate person, as well as a formidable engineer.

Robotics--Engineering.

Robotics--Research.

African Americans--Education.

Computers--Study and teaching--United States.

African American engineers.