

**Preserving.exe: Toward a National Strategy for Preserving Software  
Presenters' Titles and Abstracts**

*Hardware and Emulation to Access Creative Computing*, Nick Montfort, Massachusetts Institute of Technology

Computer programs are cultural artifacts, essential to understanding our history of creative computing: Games, digital art, electronic literature, demoscene productions, hobbyist programming, and more. Such programs can be accessed using hardware (home computers from the appropriate era) and/or emulators (which I characterize as "software editions of computers"). Both let us execute and interact with programs as well as view and modify code, and each approach has advantages for different types of research and learning.

*Saving the Software Present to Read our Robot Future*, Rachel Donahue, University of Maryland

One of the most common conceits of sci-fi--that of sentient machines, be they benevolent like Data on Star Trek or malevolent like the overlords of The Matrix--has so far eluded us, though not for lack of trying. Were that fiction to become reality, it is easy to imagine a future historian (or revolutionary, depending on how we co-exist with the artificial intelligences) researching the origins of man-machine society. Just as an evolutionary biologist or anthropologist relies on physical evidence and cultural artifacts, the evolutionary technologist would need access to hardware specifications, software design documentation, and other contextualizing material to understand the rise of sentient silicon.

Alternatively, a videogame design student might find it useful to study the work of her predecessors in the same way any other art or design student does. In this presentation I will discuss the whys of preserving software and its related artifacts.

*Serving Born Digital Video*, Doug Reside, New York Public Library

**Abstract to be added**

*Video Games @ the LOC*, David Gibson

The Library of Congress has been amassing video game related materials through the Copyright deposit process since the very early days of the medium. In 2006, the Moving Image section of the Library took over custody of the video games and since that time the collection has grown tremendously. This presentation will provide a brief background for the collection and discuss ways that the Library hopes to work to preserve the games and their accompanying materials in the years to come.

*Optical Media Mass Ingest*, Paul Klamer

CD & DVD Robotic ingest systems & issues at the National Audio-Visual Conservation Center (Packard Campus).

*Embedded, Included or Needed—Software and the Library of Congress Tangible Media Project*, Moryma Aydelott

The Library of Congress's Tangible Media Project brings expertise, resources and training to Library curatorial divisions that need assistance assessing, managing and preserving their digital content stored on various kinds of physical media. Working with thousands of items we've encountered issues processing and using software included on collection items, as well as difficulties determining and locating software to access old or obscure file formats. This brief presentation will discuss these problems and our current solutions, as well as highlight some areas for improvement.

*Software Preservation in a Software Company: The Shoemaker's Children...*, Amy Stevenson, Microsoft Archives

A quick summary of the practices and philosophies around software preservation at the Microsoft Archives, where software is the core of everything.

*The Next Cultural Commons*, Ben Balter, GitHub

The internet has been quietly assembling the next cultural canon. It's not Ralph Waldo Emerson, the Wealth of Nations, or Beowulf, but rather Ruby, WordPress, and Bootstrap. These bits not only form the basis upon which the internet runs, but increasingly this commons is beginning to include the nuts and bolts of our democracy. Today government at all levels is starting to use traditional open collaboration tools to create, archive, and share not only code, but also data, and ultimately text. What is the state of government participation in open source? Where will it be in five years? What the biggest challenges to preserving the next cultural commons?

*ASCL and Preserving Astrophysics Codes*, Peter Teuben, Astrophysics Source Code Library

The ASCL (Astrophysics Source Code Library) is a registry of codes in astrophysics that have been used in peer reviewed research, which is under active development (600+ codes now). We seek to increase the transparency of astrophysics research by making codes discoverable for examination. We have several ideas how to move ahead.

*Unlocking the Potential*, Otto de Voogd, Mozilla

Present preservation practices are just the beginning. Better systems of discovery could help us identify prior art and prevent the (re)patenting of existing concepts. Challenges include preserving or recreating the environment in which the software runs.

*The National Software Reference Library*, Barbara Guttman, National Institute for Standards and Technology

The NSRL is a collection of 15,000 software packages; a database that contains all the files in the software packages, metadata to describe the software, and hashes for every file; a quarterly release of the hashes and accompanying metadata; and a research environment for studying software. The talk will provide an overview of the NSRL, its holdings and current collections, capabilities and future plans.

*Migration of Digital Information from Obsolete Media*, Al Kossow, Computer History Museum

The Computer History Museum has a large collection of software on media which has been out of production for decades. As we migrate the contents for ingest into CHM's Digital Repository, a number of solutions are being created to make this migration possible which would be of general interest to the preservation community.

*Not a Graveyard: The Olive Archive Project*, Erika Linke, Carnegie Mellon University

In fall 2009, a Carnegie Mellon computer scientist faced with the question about where software could reside long-term approached the University Libraries, knowing that libraries were committed to retention and reuse of collections. Thus began a discussion about the issues of and possibilities for long-term archiving of software. In 2012, funding from IMLS and the Sloan Foundation has enabled enhanced development of the Olive Archive for executable content. The presentation will address issues around why we thought archiving software was strategic and how we are planning to make this archive a reality.

*I DID IT THIRTY-FIVE MINUTES AGO*, Jason Scott, Internet Archive

Jason Scott provides a report from the frontlines of feral presentation and amateur armies of historians working tirelessly for decades to preserve software and computer artifacts. He'll discuss what solutions they've provided and what has worked very well and what has not.

*Curating Time-based Media Art*, Michael Mansfield, Smithsonian American Art Museum

At the vanguard of creative culture today, artists have identified a new performance space accessed through electronic media, interactivity and digital code. Shattering traditionally accepted modes of creativity, artistic praxis has now been expanded to include vector graphics, algorithms, scripts and operating systems as well as circuit boards, plastics, copper and LEDs. These objects provide a fantastic index to the health and vibrancy of our creative culture while also foregrounding a unique set of challenges for their exhibition and preservation. This brief, virtual-verbal tour through the Media Art Collection at the Smithsonian American Art Museum will focus on the challenges and opportunities captured in contemporary electronic artworks.