

Preserving.exe: Projects of Interest and Recommended Resources

Provided by attendees of the Library of Congress Preserving.exe summit, May 20 and 21, 2013

PROJECTS, ACTIVITIES, & COLLECTIONS

Humanities and Critical Code Studies Lab at the University of Southern California: <http://haccslab.com/>

The first university space to pursue the exploration of the interpretation of computer source code using the methodologies of Critical Code Studies. Based at the University of Southern California, the HaCCS Lab will promote the development of critical vocabulary, case studies, and cross-disciplinary dialogue, specifically between the humanities and computer science.

MIT Façade project: <http://facade.mit.edu/>

Focuses on preservation of architectural material, may provide a pertinent use case. The CAD/CAM content the project was dealing with often required the use of proprietary software, some of whose vendors were not open to cooperating with the project on preservation.

Living Computer Museum: <http://www.livingcomputermuseum.org/>

Microsoft has been providing software to the Living Computer Museum on a limited basis for them to run on the machines in their facility.

NSRL partnership with Stanford to preserve the Cabrinety Collection: <http://www.nist.gov/itl/ssd/software-030513.cfm>

They also have new projects on Software ID (SWID) Tags; combining the NSRL with the National Vulnerability Database, block hashing, approximate hashing and other fuzzy matching; collection of registry, memory, and network traffic for software installation, use and removal (diskprints); and automated collection of large software distributions.

A unified approach to preserving cultural software objects and their development histories: <http://www.neh.gov/divisions/odh/grant-news/announcing-23-digital-humanities-start-grant-awards-march-2013>

A UC Santa Cruz project (NEH Digital Humanities) to document university-based game development. The project proposal is for a three-year activity to address metadata schemes and ontology for interactive software, as well as citation practice.

Cooper-Hewitt collection metadata on GitHub: <https://github.com/cooperhewitt/collection>

Internet Archive's collections include:

<http://archive.org/details/software>

<http://archive.org/details/bitsavers>

<http://archive.org/details/computermagazines>

<http://archive.org/details/computernewsletters>

<http://archive.org/details/cdbbsarchive>

<http://archive.org/details/tosec>

<http://archive.org/details/arcademansu>

Smithsonian's "encyclopedia of mathematical instruments":

<http://americanhistory.si.edu/collections/object-groups>

Consists of descriptions of types of objects (adders, mathematical charts and tables, protractors), combined with accounts the individual objects. Future plans are to include electronic calculators and software and computer objects. Further objects may be found by searching the Smithsonian-wide collections database: <http://collections.si.edu/search/>. Objects described there but not yet in object groups include cash and credit registers, adding machines, calculating machines, slide rules, and some of our microcomputers.

Astrophysics Source Code Library (ASCL): www.ascl.net

A free on-line registry for source codes of interest to astronomers and astrophysicists and lists codes which have been used in research that has appeared in, or been submitted to, peer-reviewed publications. We seek to increase the transparency of astrophysics research by making codes discoverable for examination.

US Virtual Astronomical Observatory (VAO): <http://www.usvao.org/>

The Virtual Observatory (VO) embodies the concept of large scale electronic integration of astronomy data, tools, and services on a global scale in a manner that provides easy access by individuals around the world. The US Virtual Astronomical Observatory (VAO) is the VO effort based in the US, and it is one of many VO projects currently underway worldwide.

International Virtual Observatory Alliance: www.ivoa.net

An organization that debates and agrees the technical standards that are needed to make the Virtual Observatory possible. It also acts as a focus for VO aspirations, a framework for discussing and sharing VO ideas and technology, and body for promoting and publicizing the VO.

Space Telescope Science Institute (STScI): www.stsci.edu

Enables excellence in astronomical research by optimizing the science from state-of-the-art observational instruments in space.

TOSEC: The Old School Emulation Center: <http://archive.org/details/tosec>

A retrocomputing initiative dedicated to the cataloging and preservation of software, firmware and resources for microcomputers, minicomputers and video game consoles. The main goal of the project is to catalog and audit various kinds of software and firmware images for these systems.

W3C Provenance Working Group: http://www.w3.org/2011/prov/wiki/Main_Page
To support the widespread publication and use of provenance information of Web documents, data, and resources.

Common Data Format (CDF): <http://cdf.gsfc.nasa.gov/>
Self-describing data format for the storage of scalar and multidimensional data in a platform- and discipline-independent way.

National Space Science Data Center (NSSDC): <http://nssdc.gsfc.nasa.gov/>
NASA's permanent archive for space science mission data

Variable Media Network: <http://www.variablemedia.net>
This is the oldest consortium devoted to variable media approach, including prominent institutions such as the Guggenheim, Whitney, UC-Berkeley, Langlois, Franklin furnace, and Rhizome, as well as numerous individual conservators and creators.

Matters in Media Art: <http://www.tate.org.uk/about/projects/matters-media-art>
A multi-phase project designed to provide guidelines for care of time-based media works of art.

Smithsonian's Time Based Media Art Initiative:
<http://blogs.loc.gov/digitalpreservation/2013/04/challenges-in-the-curation-of-time-based-media-art-an-interview-with-michael-mansfield/>

INCCA: International Network for the Conservation of Contemporary Art:
<http://www.incca.nl/>
A network of professionals connected to the conservation of contemporary art. Conservators, curators, scientists, registrars, archivists, art historians and researchers are among its members. Members allow access to each others unpublished information (artist interviews, condition reports, installation instructions etc) through the INCCA Database.

American Institute of Conservation's Electronic Media Group:
<http://cool.conservation-us.org/coolaic/sg/emg/>
The mission of the Electronic Media Group is two fold: (1) to preserve electronic art, electronic-based cultural materials and tools of its creation; and (2) to provide a means for conservators and related professionals to develop and maintain knowledge of relevant new media and emerging technologies.

Seeing Double: <http://variablemedia.net/e/seeingdouble>
This exhibition at the Guggenheim paired emulated works with their original versions, documenting how their success or failure in capturing the spirit of the original varied by the audience's age and other characteristics.

Core Flight Executive: <http://gsfctechnology.gsfc.nasa.gov/MissionCost.html>
A new NASA software package that promises to reduce flight software development costs in the future.

code.NASA: <http://code.nasa.gov/project/>
NASA Open Source Software.

Mozilla public repositories and FTP servers: <ftp.mozilla.org>, <cvs.mozilla.org>, <hg.mozilla.org>
All of Mozilla's code history and release builds going 15 years back.

Archive Team: <http://www.archiveteam.org/>

A loose collective of rogue archivists, programmers, writers and loudmouths dedicated to saving our digital heritage

Textfiles: <http://textfiles.com>

A glimpse into the history of writers and artists bound by the 128 characters that the American Standard Code for Information Interchange (ASCII) allowed them. The focus is on mid-1980's textfiles and the world as it was then, but even these files are sometime retooled 1960s and 1970s works, and offshoots of this culture exist to this day.

TOOLS

Olive Executable Archive: <https://olivearchive.org/>

RunMyCode: <http://www.runmycode.org/CompanionSite/>

A cloud-based platform that allows researchers to upload their data and code into a webspace so others can examine these methods and verify them.

BitCurator: <http://www.bitcurator.net/>

Tools for Digital Forensics Methods and Workflows in Real-World Collecting Institutions

Variable Media Questionnaire: <http://variablemediaquestionnaire.net>

A survey instrument is used by dozens of museums to capture opinions on and options for the best way to preserve cultural creations.

PUBLICATIONS, TRAINING, TEACHING, AND GRANT PROGRAMS

Software Studies Series: <http://mitpress.mit.edu/books/series/software-studies>
(edited by Lev Manovich and Noah Wardrip-Fruin) from MIT Press.

Platform Studies Series: <http://mitpress.mit.edu/books/series/platform-studies>
(edited by Nick Montfort and Ian Bogost): from MIT Press.

Track Changes: A Literary History of Word Processing (book in progress)
<http://trackchangesbook.tumblr.com/>

Nick Montfort and Noah Wardrip-Fruin, "Acid-Free Bits Recommendations for Long-Lasting Electronic Literature": <http://www.eliterature.org/pad/afb.html>
Offers suggestions to electronic literature authors for developing work that is longer lasting.

Permanence Through Change:

http://www.variablemedia.net/e/preserving/html/var_pub_index.html

This free publication details many of the thorny issues associated with preserving new media art, and lays out the variable media approach as a possible way forward.

Re-collection: Art, New Media, and Social Memory: <http://re-collection.net>

Due out from MIT this year, this book--as far as we know the first academic monograph on digital preservation--makes the case for radically inclusive strategies for preserving new media culture.

Computers Take Flight: A History of NASA's Pioneering Digital Fly-by-Wire Project: http://www.nasa.gov/centers/dryden/pdf/182985main_DFBW_rev1.pdf

Media Archeology Lab at UC Boulder: <http://loriemerson.net/tag/media-archaeology/> and <http://loriemerson.net/media-archaeology-lab/>

A place for cross-disciplinary experimental research and teaching using the tools, the software and platforms, from the past.

Maryland Institute for Technology in the Humanities: <http://mith.umd.edu>

A leading digital humanities center that pursues disciplinary innovation and institutional transformation through applied research, public programming, and educational opportunities

Digital Curation program of the University of Maine:

<http://DigitalCuration.UMaine.edu>

Launched in fall 2012, this online graduate program trains students in the curatorial workflow from acquisition to preservation, including the real-world application of instruments like the Variable Media Questionnaire.

Relevant grant programs in the NEH Division of Preservation & Access and the Office of Digital Humanities: <http://www.neh.gov/grants>

- Humanities Collections and Reference Resource (DPA)
- Research and Development (DPA)
- Digital Humanities Start-Up Grants (ODH)
- Digital Humanities Implementation Grants (ODH)