# Making ACM History: Part 1 PREPARING YOUR OFFICE

ACM's history depends vitally on its members documenting their activities and accomplishments. ACM headquarters and "official" records tell only part of the story. Most of ACM's activities are member-driven. Your personal files can literally make history.

### **Advanced planning**

Start thinking about your historically significant records 5 years before "cleaning out" your office. Be honest and humble about your personal attainments. Think more widely about your ACM and professional activities. If you have 30 unsorted file drawers . . . try to identify the ones with permanent research value. This material needs to be archived (see part 3).

### What do I save?

Personal papers have permanent research value *if* they help understand events of historical significance *and* if the materials are rare or unique. Items with significant research value include:

- Correspondence, memos, lab notebooks, unpublished reports—especially if there are no other existing copies
- Materials documenting significant ACM activities (SIGs, conferences, committees)
  —if *not* in the ACM Digital Library
- Grey literature, unpublished reports, company- or institution-specific reports especially if they are rare or unusual

## What can I discard?

Many people have file drawers full of published journal articles, but these have low archival priority. If you can readily get an online copy (e.g. ACM DL or WWW) it does not really belong in a research-grade archival collection. Some other items that are not "archival":

- Computer manuals—these are being collected by Bitsavers.org
- Computer science textbooks
- Most ACM conferences (now on DL)

### What are the costs?

An archive or repository that takes in your materials is making a commitment to store your materials and keep them publicly accessible—forever. It takes significant staff time to organize a collection, to prepare it for public access, to serve researchers far into the future. Not every scrap of paper, or every email, can be saved.

What happens when I'm gone? Appoint a literary executor for your personal papers, especially for items of significant historic value that you can't part with. Write specific instructions about which materials are for family members—and what is to be donated to a specific repository (please contact them). Include pointers or handles to materials that are available in a library and/or digital repository.

I have images, emails, software .... See part 2 of this series.

**Don't forget your local library** A local college or city library may take books and journals that might already be in a big university library. Contributions to a local history will be of special interest. You can contact teachers in local high schools, who often are looking for fresh angles for History Day or Science Fair projects.

## Making ACM History: Part 2 ... AND YOUR COMPUTER FILES

Computing cannot be fully understood using traditional paper sources. Software programs, graphics, simulations, and databases are highly significant—but archiving them is a challenge. You might think that digital storage is "cheap" and expandable. But there are many *unsolved problems* of standard formats and "migration" between generations of them. Also, remember to distinguish the format (e.g. .mp3 or .pdf) from the physical storage medium (on a hard drive, CD, or networked server). Most repositories cannot deal with old floppy disks—and may ask you to upload "standard" format files to a server for transfer to the repository.

I have hundreds of photographs .... Photographs have immense research value. Researchers need to know *who* or *what* the photograph shows, and *why* it is significant. Take 5 minutes for each photo—write who/ what/where (in pencil on the back), and explain why it is a significant image. If there's not 5 minutes of memories, it might not be worth saving. Such metadata can be embedded in digital photos (Exif) or included with the image in a PDF/A (the standardized archival subset of PDF).

The preferred archival standard for images is TIFF format (uncompressed), but JPEG and PNG are also acceptable standardized formats. Standards-setting means that TIFF images will be "supported" forever—either directly or through a migration path to a new standard format. Many archivists prefer images to be posted on a web-accessible server (for electronic transfer to the repository). Remember, CD-ROMs that you burn might last as little as 2 years.

## My emails are ...?

Email is our era's equivalent of the 19th century's letters—very high research value. Unfortunately, while paper records have been archived for centuries, archival standards do not exist for emails, attachments, and metadata. Here are some **suggestions**:

- Save your emails into a separate "mailbox archive" and upload to a server (for electronic transfer to the repository)
- Use archival PDF/A format for text/images
- Transfer data that is on 3.5" or 5.25" computer disks or CDs and DVDs to a readable format on a server
- Consider printing out important emails with full headers—creating a paper archive that is readily readable for decades to come.

And audio and video recordings? These, too, have immense research value. Researchers still need to know who, what, where—and *why* the recording is significant. Clear identification is even more important with recordings since they cannot be inspected directly.

Technical challenges to archiving recordings are formidable, since standards are not (yet) set. The best advice is to aim for a "generic" rather than proprietary solution. MP3, AAC, and MPEG-4 are ISO standards; WAV and AIFF are frequently used. Absent a single standard, it seems smart to save video in multiple formats. Video standards are not yet stable.

I have magnetic tapes from the 1960s .... Special software and data can be historically significant—rare and unique. If you have something "really special" please discuss it directly with a software or digital archivist.

## Making ACM History: Part 3 DONATING YOUR RECORDS

Once formed (see parts 1 and 2), collections are legally transferred to an archive, library, museum, or other "receiving institution" by means of a gift agreement. The gift agreement clarifies property and copyright, disposition rights, care, and access to the collection.

### **Property and copyright**

In most cases, property and copyright are transferred to the receiving institution. Possessing copyright enables the receiving institution to grant researchers permission to quote extensively from the collection. Otherwise, researchers can use only limited quotes under the "fair use" doctrine.

## **Disposition rights**

Granting disposition rights to the receiving institution allows the archivists to remove from the collection any non-archival material (such as personnel records or other private items). In accordance with your wishes, such material can be returned to you, offered to another repository, or destroyed.

#### Care of the collection

Professional stewardship of a collection includes:

- storing the materials in a secure, climate controlled facility
- re-foldering and re-boxing materials into acid-free containers where needed
- preparing a detailed guide to the collection that facilitates research
- disseminating the collection guide in print form and online
- publicizing the collection's availability to the public for research

## Administering access

The gift agreement also allows the receiving institution to provide public access to the collection. While most non-corporate archives

are open to the public-and access is made available without cost—access is carefully controlled. Before using materials, researchers are typically interviewed by a member of the staff. Researchers state why they wish to use the material and what the product of their research will be (book, dissertation, article, museum exhibit, etc.). Collections are housed in "closed stacks"; onsite researchers use collection guides to identify the specific material they need, and the appropriate boxes are brought to a reading room where their use is monitored. In rare circumstances, an archive or repository will agree to (temporarily) restricting access to a collection-for instance, in the case of proprietary concerns.

## **Tax deductions**

When transferring records, donors often inquire about appraising historical records and tax deductions. IRS regulations prohibit the receiving repository from setting a value for a collection. An independent appraiser will be evaluating the fair "market value" of the materials, and high research value may not translate into a high market price. Check with your tax advisor about deducting as a charitable contribution the cost of sending your records to a repository.

## For the long haul ...

Receiving institutions depend on financial contributions that can support the purchase of archival supplies, special initiatives such as digitization, and staff time for processing the collection. Consider an annual gift to help support the cost of long-term care.

## First contact . . .

See <history.acm.org> for a list of institutions active in archiving computing history.