ANNUAL REPORT

of the ACM History Committee
For the Period: July 1, 2021 - June 30, 2022
Submitted by Barbara Boucher Owens, Chair
Version: August 15, 2022

Executive summary

- Turing Award History Project: In Q4 we resumed in-person oral history interviews with awardees; these had been paused during the pandemic. We leveraged the Committee's new partnership with the Computer History Museum for conducting interviews with select Turing Award winners. The video clips added during FY 2021 have resulted in increased visits to the Turing website and associated YouTube channel. We will produce new video clips as upcoming interviews are completed. A major priority is to properly archive interview data (about 10TB) under ACM control.
- ACM Key Award Winners Video Series Project: Phase I of this Development Fund supported project is substantially complete, with a total of 72 interviews, 64 completed transcripts, and the remaining eight transcripts being finalized. Phase II, approved in June 2021, will add 72 interviews, of which we have already collected 13 interviews. Permanent archival storage is still an open issue.
- **History and Archiving Fellowships program**: We received a total of eleven fellowship project proposals. Five submissions were selected for awards.
- **Heritage Project**: The Heritage workshop is now an on-line seminar, *Capturing Hidden ACM Heritage*, to be held September 30-October 1, 2022. The workshop targets SIGs and other ACM organizational units and provides support for planning and carrying out heritage projects, with Vicki Hanson as the opening speaker. In September 2022, the Committee will release the website for the ACM Heritage project as well as an exemplar website for the Computing Educators Oral History Project.
- India Technology Leaders Video Project: The project has collected interviews with one technology leader and is collecting a set of retrospective interviews about the life and work of a second pioneer, who passed away before he could be interviewed.
- **History Committee web presence**: The History Committee's website is stable and updated regularly. The Committee uses Google Drive as a shared storage resource and the ACM listserv for communications.
- Challenges and concerns:

- Continuing impact of COVID restrictions on budget and projects.
- Issues of diversity and global participation as integral to all Committee projects.
- Procedures for permanent archival storage of content (written, audio, video).
- Regular access to detailed budget reports and expenditures to monitor the Committee's use of funds.
- Ensuring up-to-date information on the ACM website about the Committee's on-going projects, including ACM's history page.
- Continuing progress with web-based projects that rely at least in part on collaboration with ACM Headquarters for policies, access, and dark storage.

1. BASIC INFORMATION

1.1 Membership

Barbara Boucher Owens, Chair, Southwestern University, joined December 2015

Members, in reverse chronological order of joining

Troy K. Astarte, Swansea University, joined September 2021

Anna C. Loup, USC and Gray's Harbor College, joined September 2021

David C. Brock, Computer History Museum, joined May 2019

Amanda Wick, Charles Babbage Institute, joined May 2019

Sachin N. Maheshwari, IIT Delhi, joined July 2018

Jeffrey Yost, Charles Babbage Institute, joined July 2018

Erik Rau, Hagley Museum, joined April 2018

Vicki L. Almstrum, Texas State University, joined December 2015

Barbara Boucher Owens, Southwestern University, joined December 2015

Kim Tracy, Rose-Hulman Institute of Technology, joined October 2014

Roy Levin, Microsoft (retired), joined November 2012

Mary Whitton, University of North Carolina Chapel Hill (retired), joined May 2010

Carol Hutchins, Courant Institute Library, joined February 2005.

Members who rotated off during report year

Ursula Martin, joined April 2017, left June 2021 Judith Bishop, joined August 2021, left February 2022

1.2 Purpose

The History Committee fosters collection, preservation, and interpretation of the history of the ACM and its role in the development of computing. To this end, the Committee provides guidance within the Association and carries out activities independently and in collaboration with other groups.

1.3 Subcommittees

- Turing Award History Project oversight 2-person subcommittee (Levin [chair], Brock)
- Budget and finances 2-person subcommittee (Whitton [chair], Rau)
- History and Archiving Fellowships program 6-person subcommittee (Tracy [chair], Brock, Martin, Rau, Whitton, Yost)
- Heritage Project 5-person subcommittee (Almstrum [chair], Hutchins, Loup, Tracy, Wick)
- ACM Key Award Winners Video Series Project oversight 2-person subcommittee (Huchins, Levin); funded by a Development Fund Award.
- CEOHP Heritage exemplar 2-person subcommittee (Almstrum, Owens)
- India Technology Leaders Video Project 2-person subcommittee (Maheshwari, Brock)
- Web presence 4-person subcommittee (Tracy [chair], Almstrum, Hutchins, Wick)
- SGB Representative Tracy

1.4 Dates of committee meetings.

No face-to-face meetings this fiscal year due to Covid-19

Ten teleconferences using Zoom:

7/19/2021, 8/16/2021, 9/20/2021, 10/18/2021, 11/15/2021, 1/17/2022, 2/21/2022, 3/21/2022, 5/18/2022, 6/20/2022

Two additional meetings (12/2021, 4/2022) were planned but canceled.

2. PROJECT SUMMARY

NOTE: We are unable to report expenditures by project because the data is not available to us.

DEVELOPMENT FUND SPECIAL PROJECTS (1)

ACM Key Award Winners Video Series

Phase I

- Approved October 2018 for three years and 72 interviews. Work commenced at the start of calendar year 2019, with the first interviews conducted in April 2019. We completed the goal of 72 interviews by April 2022. Thus far 64 interviews have been transcribed; editing and interviewee approval is underway.
- Responsible Person: Hutchins, subcommittee chair; Chuck House, contractor
- Authorized funds for Phase I: \$336,000
- Funds spent: Data not available
- Completion planned for the end of calendar year 2022.

Phase II

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- Approved June 2021 for three years (2022–2024). Goal of 72 additional interviews to be completed by end of calendar year 2024. As of June 30, 2022, 13 interviews and transcripts are complete.
- Responsible Person: Hutchins, subcommittee chair; Chuck House, contractor
- Authorized funds for Phase II: \$336.000
- Funds spent: Data not available
- Planned completion at the end of calendar year 2024.

ONGOING COMMITTEE BUDGET FUNDED PROJECTS (5)

Turing Award History Project

- This project adds web pages to amturing.acm.org for recently named Turing Award recipients, collects video recordings of oral histories with Turing Award Laureates, and develops highlight video clips that are added to the YouTube channel and associated Laureate web pages. This year, interviewing activity was slow due to the pandemic; nonetheless, five interviews are in the pipeline, three of which are for Turing Laureates named since the start of the pandemic. Two of these are joint interviews with the Computer History Museum (CHM) under an ongoing agreement; a third interview is a joint product of CHM and Stanford University and will be licensed to ACM. We did not add video clips this year due to the lack of completed interviews.
- See the TO HIGHLIGHT section at the end of this report for details about the positive influence of the video clips have had in increasing visits to the Turing Award History Project website and YouTube channel.

- Responsible Person: Levin, subcommittee chair; Tom Haigh, David Jefferson, and Franny Corry, contractors.
- Start Date: FY 2016 as a special development project; as of FY 2021 an ongoing Committee project.
- Status: Ongoing.
- Funds Budgeted: \$45,000
- Funds Spent: Data not available

ACM Heritage Project

- We changed the project name to "ACM Heritage" (earlier: "SIG Heritage") to reflect our goal to provide broad support for heritage projects across organizational units within the global ACM, including SIGs, regions, and committees. The Heritage project supports representatives as they document and preserve their organizations' activities, artifacts, and archives. Exemplar projects will share successes and best practices; so far this includes the Turing Award History Project, the ACM Key Award Winners Video Series Project, and the Computing Educators Oral History Project (CEOHP); the site will also point visitors to heritage projects being done by other ACM organizational units. The migrated website for CEOHP and the Heritage website will launch in September 2022. The workshop we had originally envisioned for May 2022 is now an on-line seminar that will occur September 30-October 1, 2022, with Vicki Hanson providing the opening presentation.
- Responsible Person: Almstrum, Wick, Loup.
- Start Date: April 2017.
- Status Ongoing.
- Funds Budgeted: \$10,000
- Funds Spent: Data not available

History and Archiving Fellowship 2022 Awards

- The purpose of the Fellowship program is to encourage research on topics related to ACM History. Each year the Committee aims to award a small number of research fellowships for up to \$4,000 per award. The ACM Heritage project can also provide additional support to related projects.
- The Committee website has information about prior awardees, projects, and results, as well as an example of a successful fellowship proposal. history.acm.org/projects-and-initiatives/fellowship-for-the-advancement-of-acm-history
- In March 2022, due to a high number of quality submissions, five of eleven applications were selected for funding:
 - Ruth Lennon and Rukiye Altin, Letterkenny Institute of Technology and METU Development and Foundation Schools, *ACM-W Europe History: The origins and advancement of the ACM-W Europe*
 - Bonnie Mitchell and Jan Searleman, Bowling Green State University and Clarkson University, Archiving the History of ACM SIGGRAPH Communities and Activities (See history.siggraph.org)
 - o Dan Pillis, University of California, Los Angeles, 3D Object/Artifact Archive
 - Eric Rawn, University of California, Berkeley, Investigating the Intellectual History of Computing and HCI Research in the 1970s and 1980s: How Philosophy Helped Define the Personal Computing Era
 - Huixin Tian, Indiana University Bloomington, *Asian Migrants and Employment in the ICT Industry*.
- Start Date: October 2021; recipients normally spend funds within a year of award.
- Responsible Person: Tracy.

• Status: Ongoing (annual project).

• Funds Budgeted: \$16,000

• Funds Awarded: \$16,125 (overage from ACM Heritage Project budget)

ACM India Technology Leaders Video Project

- The original project plan included three computer industry pioneers from India. Due to Covid and the deaths of two of the pioneers, the project goals have evolved. The interviews with Prof. Ramaswamy are nearly complete, with transcripts completed and approved. While conducting these interviews with Prof Ramaswamy, the project developed best practices for planning future interviews in India.
- For one of the deceased pioneers, a good deal of information is already available about his contributions, so he is no longer included in this project.
- For the other deceased pioneer, Prof. Rajaraman, we are now collecting a series of retrospective interviews about his life and work.
- All of the interviews will be copyrighted by ACM and the Computer History Museum will archive the completed interviews, with copies at the Charles Babbage Institute. ACM India has committed to provide future funding.

• Responsible Person: Maheshwari

Start date: June 2019Status: Ongoing

• Funds Budgeted: \$2500

• Funds Spent: \$0

History Committee web presence

- The Committee website presents information about Committee business and activities (e.g., meeting minutes, the Committee's history, content from the Committee blog prior to WordPress). The Web subcommittee manages the HC Operations resource on Google Drive, the Committee-related email addresses in the history.acm.org domain, and the Committee's mailing list via the ACM listserv. We have established three new email addresses to support committee work: questions@history.acm.org, fellowship@history.acm.org, and heritage@history.acm.org.
- Responsible Person: Tracy
- Start Date: Site migrated to ACM WordPress hosting in 2019.
- Status: Ongoing.
- Funds Budgeted: \$0Funds Spent: \$0

3. PLANS

- 3.1 Projects that will be completed or terminated in the coming year.
 - The Phase I grant period for the ACM Key Award Winners Video Series Project was extended through the end of calendar year 2021 to account for challenges during the pandemic and will complete by end of calendar year 2022. Phase II is underway.
- 3.2 Important changes or milestones in active projects during the coming year.

Turing Award History Project

- Interviews to be completed in FY23: John Hennessy (CHM/Stanford; nearly complete), Dana Scott (video complete), Pat Hanrahan (CHM; draft video complete), Al Aho (CHM; interview completed in June), Judea Pearl (CHM; supplementary interview scheduled for July). Additional interviews will be scheduled as logistics and budgets permit. Video clips will be created from the interviews as they emerge from production.
- A high priority matter is for ACM to archive the project source data in a suitably secure storage facility, which did not happen last year. The data (about 10TB) has been shipped to ACM HQ but is not yet securely stored; backup copies reside with the project consultants and the subcommittee chair. Once archiving occurs, it is highly desirable to have a second, independent storage location; the Committee suggests the Charles Babbage Institute, since ACM already has an archiving agreement in place.

ACM Key Award Winners Video Series

- Activities we are considering separately from Phase I and Phase II:
 - Following the success of the video clip work for the Turing Award winners, extract clips from each Key Award Winner video interview and post on a YouTube channel as well as on each awardee's ACM award webpage.
 - Create composite YouTube "stories" around particular themes (e.g., initial
 inspiration for a computing career, epiphanies during a career, perspective on
 gender bias, and other emerging themes). Each story could include extracts from
 several of the interviews.
 - Create one or more monographs for ACM Press.

ACM Heritage

- At the end of September 2022, the History Committee will host an on-line seminar, "Capturing Hidden ACM Heritage". In addition to outstanding keynote speakers, participants will explore a series of exemplars and learn about tools and techniques to support their own organization's heritage projects. This seminar will lead to follow-up activities that emerge from the needs and priorities we identify during the seminar, for example additional workshops or special sessions at conferences.

 (history.acm.org/2022/07/17/call-for-participation-heritage-seminar/)
- We are applying to publish a proceedings as part of the ACM International Conference Proceedings Series in the weeks after the seminar, with the articles included in the ACM Digital Library (dl.acm.org). Presenters at the September seminar will be invited to publish a related article herein.
- The website for the Heritage project and the first exemplar, CEOHP, will be launched prior to the on-line seminar. The Heritage project site will be a living site that offers tools to help interested individuals in planning and carrying out heritage projects for their organizations. The vision is to establish frameworks usable by all interested SIGs and ACM organizations.

ACM India Technology Leaders Video Project

• We are working towards completing the Rajaraman interviews and transcription. Two retrospective interviews about Prof. Dutta Majumder, who has passed away, are in progress, with one about his professional life and the second biographical.

History and Archiving Fellowships

- The project continues with the same level of funding (\$16K). We will distribute the call for next year's fellowships during the last 2 months of CY 2022 and select the FY 2023 fellowship winners in March or April, 2023.
- Because many of the proposals resonate with the goals of the ACM Heritage Project, the committee has voted to use some Heritage Project funds to support the fellowship project.
- We are exploring ideas to encourage more applications from non-traditional applicants and individuals from smaller institutions.

History Committee web presence

- The Committee website, based on the ACM WordPress theme, is stable and updated as needed to support work by the Committee.
- The Heritage and CEOHP websites, both based on the ACM WordPress theme, will be launched just before the seminar in late September; the content will evolve as needed to reflect new efforts.
- We are working directly with ACM IT staff to solve problems with the websites, including a specific issue with a menu not displaying for any of our three sites.
- 3.3 New projects or programs which are proposed or contemplated.
 - **Recruitment:** Add new Committee members, at least one of whom is based outside of North America for better global presence.
 - Outreach/Marketing: The Committee is striving to coordinate more effectively with ACM HQ regarding outreach efforts. During the past year, we have worked with Yan Timanovsky, Education and Professional Development at ACM, and Bruce Shriver, ACM's Senior Marketing and Communications Manager. The overall goal is to better communicate the Committee's activities and accomplishments via ACM channels. In kind, the Committee seeks information from ACM regarding global initiatives and how these can affect the Committee's work, for example efforts planned by centers outside of North America.
 - **History of ACM webpage:** The Committee believes it is best placed to manage portrayal of ACM's history (including attribution, content, and purpose). In particular, the History of ACM page (acm.org/about-acm/acm-history) is attributed to the History Committee, but no one currently on the Committee was involved in creating the content. The Committee wants to be proactively involved with updating the content of this page and other history-related sections of the ACM on-line presence.
 - ACM's overall digital preservation strategy: The Charles Babbage Institute (CBI) is the official archival agency for the ACM, with a focus on hard copy archives. ACM has established "cold storage" in support of the SIGs, although this work seems to be stalled. The Committee seeks a clear process for preserving artifacts from Committee projects, as well as for supporting

ACM groups (notably SIGs) that are working to preserve their history. During FY22, the Committee hopes to support ACM management in developing a well-defined, functioning process for this preservation effort, including practical matters such as storage resources.

3.4 Committee diversity

- The Committee currently has 13 members.
- Five are female, two are non-binary, and the remaining six are male.
- Three are relatively early in their careers, six are mid career, and four are late career or retired.
- The geographic distribution includes two international members and representative geographical coverage across the USA.
- Half of the members are academics, one works as a librarian in a university institute, three direct museums or historical institutes, and three have extensive careers in industry.
- The Committee has strong SIGPLAN, SIGCSE, SIGCOMM, and SIGGRAPH connections.
- We seek better representation outside of North America, as well as ways to broaden ethnic representation.
- The two members who left the Committee during FY21 were both female and both from outside of the USA (U.K. and South Africa).

4. COMMENTS

- Things we are excited about:
 - The video clips for the Turing Award project have driven traffic to that site.
 - The **Heritage seminar in late September** will build momentum within the Heritage project and its continued work.
 - ACM's CEO, Vicki Hanson, participated in the Committee's October 2021 meeting.
 This provided the Committee members with good information and led to useful discussion as the basis for continued planning and opened the door to inviting her as a speaker at the Heritage seminar.
 - The ACM 75th anniversary celebration provided an excellent opportunity for several Committee members to connect with other attendees to talk about the History Committee, its projects, and its priorities.
- Things we are concerned about:
 - Systematic, permanent, and dark archiving of historical materials, including past and current on-going work.
 - O Support from ACM is uneven. This has hampered some Committee activities. Most notable have been delays in matters related to IT as well as comprehensive, timely, and accurate reporting from ACM headquarters on expenditures at the transaction level.
 - o Addressing the global arena, both in terms of outreach and Committee membership.

TO HIGHLIGHT

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Video clips from the Turing Award interviews: These have seen an upward trend of views during the past year, to around 75K new views. The video clips have played a key role in increasing traffic to videos associated with the Turing Award Video Project.

- The biggest surge occurred in May and June, when many people watched the Lamport video clips. The clip about the Bakery Algorithm has more than 19K lifetime views; four of the Lamport clips each have more views than the original full video (which has 677 views).
- Other Turing Award winners whose video clips have been viewed frequently are Knuth, Kahan, and Hoare. The clips that appear to be most popular are those where an award winner describes their most famous ideas, discoveries, or inventions.
- The video clips have taken on a life of their own within YouTube, with an increase in YouTube recommendations for Turing Award videos during the past year. More than 30% of views come from YouTube's suggested videos, 20% from YouTube search, and only 20% from external links (which include embedded videos on the awardee profiles, tweets, and Wikipedia links).
- Of the 75K views over the last year, only about 7% (5K) originated from ACM links (including the embedded videos).
- The video clips attract a global audience. The countries with the most viewers are the USA (28%), India (9%), Germany (4.5%), and the U.K. (3.6%).
- To browse the clips, visit <u>youtube.com/TuringAwardeeClips</u> and select the "Videos" tab.