

Finding our Place in History: Six Decades of Women in Computing

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Abstract

Women have played a significant role in computing since the first digital computers were built, yet their history is largely unknown. This presentation will provide an overview of women's experiences in computing in the United States and United Kingdom since World War II. Topics will include women's contributions to computing from the earliest digital computers to the present; obstacles women have faced in pursuing computing careers and their strategies for overcoming them; the enduring appeal and rewards of computer work; and how opportunities and challenges have varied over time and between the US and Britain. These observations will be illustrated by examples and advice collected from interviews with sixty-two senior women in the field.

Objectives

This presentation will provide an overview of women's experiences in computing in the United States and United Kingdom since World War II, based on documentary sources and sixty-two in-depth interviews the speaker conducted with senior female computer professionals in both countries. The objectives are to bring to light little-known aspects of women's historical role in computing; to convey the excitement and appeal of computing for women over the last 60 years; and to discuss how women have dealt with issues of access to career opportunities, gender discrimination, and career-family balance.

Format and Length

The proposed format is an hour-long session, with a 30-40 minute presentation (illustrated with slides) followed by discussion with the audience. Alternatively, if other historical presentations have been proposed and the conference organizers would like to combine our talks into a single panel, I could give a shorter presentation as part of that panel. I do not expect to include written materials.

Audience

There are no restrictions on the size or type of audience; anyone who is curious about the past experiences of women in computing is welcome. The ideal audience would include new members of the profession who want to learn about women's historical place in the field as well as senior members who can contribute their own views and experiences during the discussion.

Competing points of view

Because of the variety of sources used, there will be a range of viewpoints included in the presentation. The discussion period will give audience members a chance to debate whether the experiences I describe are representative and to present alternate views.

Topics will include:

- An overview of women's contributions to computing, from WWII to the present.
- How women gained access to computing jobs by finding—or creating—openings.
- What drew women to computing? Has the nature of its appeal changed over time?
- Obstacles women faced in pursuing computing careers (including career-family balance) and their strategies for overcoming them.
- How the opportunities and challenges for women have changed over time. What have been the effects of key events such as the rise of academic computer science, the civil rights and feminist movements, the introduction of personal computers, and recent efforts to raise numbers through “women into computing” programs?
- Contrasts between American and British experiences.
- Historical mentoring: Interviewees' advice for young women entering the field.

Knowledge to be gained

Attendees will discover women's 60-year legacy as computer professionals. They will learn about career strategies that have succeeded in the past and will gain an awareness of how opportunities and obstacles have changed—or persisted—over time. The presentation will allow attendees to place their own experiences in historical context and to contribute their insights during the discussion.

Speaker

Janet Abbate is the Garfield Fellow in the History of Information Science at the Chemical Heritage Foundation. She received her Ph.D. in from the University of Pennsylvania in 1994 and has been a postdoctoral fellow at the IEEE History Center and the Smithsonian. Her publications include *Inventing the Internet* (MIT Press, 1999) and numerous articles on the history of computer networks. She has taught history of science and technology at Harvard, Rutgers, the University of Maryland, and Johns Hopkins, and will be joining the faculty at Virginia Tech in August 2004. Abbate's current research project is a history of women in computing, funded by the National Science Foundation, which examines the experiences of female computer scientists and programmers in the United States and Great Britain from WWII to the 1980s. She recently guest edited a special issue of the *IEEE Annals of the History of Computing* (25:4) on Women and Gender in the History of Computing, which includes excerpts from interviews she conducted for her project.