In the history of computing’s early years, scholarship on the history of software lagged behind that of the history of computer hardware. This happened even though descriptions of how to program—or “adjust,” in that time’s parlance—computing devices was essential even before the first computers. Drawings of how to plug or adjust IBM and Bull punched-card machines were crucial for this equipment’s success, as were the “connection boxes” for Powers punched-card machines. They had one connection box for every adjustment or program. The EDVAC design project at the University of Pennsylvania from 1944 to 1945 was a response to the difficulties of programming the ENIAC electronic calculator. The stored-program concept was an outcome of this EDVAC project.

The history of computer software only emerged in the 1970s. Computer pioneers took the initiative in studying software and documenting the history of a series of early computer languages at a conference in 1978. This work was complemented by a new group of computer pioneers at a conference in 1993. Then in the late 1990s, university-based computer historians started to focus on the history of software. The Charles Babbage Institute (CBI) of the University of Minnesota raised the issue and applied for a National Science Foundation (NSF) sponsored project to advance understanding and resources in the history of software. NSF funded the project from 1999 to 2003. The project facilitated the institute’s work with the community and created an online dictionary of software history, initiated an electronic scholarly journal on software history, and produced a large series of research-grade oral histories with pioneers of software history. On top of completing these objectives, CBI developed a major online software history bibliography.

Simultaneously in Great Britain, Martin Campbell-Kelly started researching the software industry’s history and his material included Charles Babbage Institute archives. He wrote a comprehensive history of the emergence and growth of the software industry since the 1950s. Starting with a handful of software contractors who produced specialized programs for the few existing machines, the industry grew to include producers of corporate software packages and then makers of mass-market products and recreational software. Campbell-Kelly’s book tells the story of each of these types of firms, focusing on the products they developed, the business models they followed, and the markets they served.

In 2000, a group of people who had been active in the leading software and services trade association formed the Software History Center, which was dedicated to preserving for future generations information about the companies, people, products, and events that shaped the computer software and services industry. It is now called the Software Industry Special Interest Group and is affiliated with the Computer History Museum (CHM) in Mountain View, California. The group has been active in collecting and communicating the history of software; its collections are deposited with the CHM and CBI.

The group has made a great contribution documenting and describing the history of the software industry, primarily in the US. The industry originated with the entrepreneurial computer software and services companies of the 1950s and 1960s. It then grew dramatically through the 1970s and 1980s to become a market force rivaling that of the computer hardware companies. And by the 1990s, it had become the supplier of technical know-how that transformed the way people
worked, played, and communicated every day of their lives.

Burton Grad and Luanne Johnson from the Software Industry Special Interest Group have edited a series of special issues of the IEEE Annals of Computing History, featuring software industry participants’ own stories. (Johnson is also a member of the Annals editorial board.) Through this great work, they have added essential new knowledge on the history of software and its industry. This is the fifth in their line of special software history issues. The first four issues told great stories about “The Start of the Software Products Industry” (vol. 24, no. 1, 2002), “PC Software: Word Processing for Everyone” (vol. 28, no. 4, 2006), “PC Software: Spreadsheets for Everyone” (vol. 29, no. 3, 2007), and “Mainframe Software: Database Management Systems” (vol. 31, no. 4, 2009). As editor in chief, I thank Burton Grad and Luanne Johnson for their contributions to the Annals and its readers through their labor with these four special issues. I also thank Burton Grad for his achievements as guest editor of this special issue.

References and Notes

Lars Heide is an associate professor at the Centre for Business History at the Copenhagen Business School. Contact him at heide.lpf@cbs.dk.