

## A stroll through computer history at the CHM

Dag Spicer



Dzhou, Wikipedia, CC BY-SA

The Computer History Museum is the world’s leading institution for the preservation, display and interpretation of computing history, from antiquity to the present day. It began life as the DEC (Digital Equipment Corporation) Computer Museum in the mid-1970s when DEC co-founder and president Ken Olsen and DEC VP of Engineering Gordon Bell rescued the legendary 1951 MIT Whirlwind computer from the landfill. Its modern Silicon Valley instantiation began in 1995 when Gordon Bell and entrepreneur Len Shustek hired Dag Spicer, then a PhD student in history and electrical engineering at Stanford University, to manage the collection.

Starting with some 1,200 seminal objects, many from the first generation of computing, CHM’s collection now includes over 120,000 items, comprising hardware, software, ephemera, media, and over a linear mile of computer-related documentation. The collection can be searched.<sup>1</sup> About 1% of this collection is on permanent display in CHM’s award-winning exhibition, “Revolution: The First 2000 Years of Computing”, and we’ll be taking a look at some of the canonical objects from “Revolution” during this talk. These will include the Abacus,<sup>2</sup> the Antikythera Mechanism,<sup>3</sup> ENIGMA,<sup>4</sup> SAGE,<sup>5</sup> IBM System/360,<sup>6</sup> Cray-1,<sup>7</sup> Xerox Alto,<sup>8</sup> Apple-1,<sup>9</sup> an

original Google server rack,<sup>10</sup> and more. The presentation is application centered so we’ll focus on what problems people were trying to solve at the time and how that can compare with what came before and what came after.

A second major exhibit, “Make Software: Change the World”,<sup>11</sup> celebrates the role of code in our lives by focusing on seven application stories: Photoshop, Wikipedia, Texting, MRI, Car Crash Simulation, and World of Warcraft. The idea is that each of these types of software often affects us, either directly or indirectly, as we go through life. It’s a near statistical certainty that most advertising images you see, for example, have been processed, to some degree, in Photoshop.

Beyond its public exhibit functions, CHM is also a world-class center for research into the history of computing. At its research center, anyone wishing to access the Museum’s massive archive of computing literature and reference material has only to make an appointment. There are no restrictions or costs (unless you request scans).

In-person visitors to the Museum can also enjoy three unique “retrocomputing” demonstrations of vintage technology of the 1960 DEC PDP-1,<sup>12</sup> the 1959 IBM 1401 Electronic Data Processing System,<sup>13</sup> and the 1956 IBM RAMAC<sup>14</sup> — the head-disk assembly of the world’s first disk drive. Plenty of whirling tape drives, flashing lights, and interesting mechanical sounds await you!

◇ Dag Spicer  
dspicer (at) computerhistory dot org

[Editor’s note: From its start in Marlborough, Massachusetts, the museum moved to Boston, where, on 21 May 1986, the publication of Knuth’s *Computers & Typesetting* series was celebrated with a “coming out” party. Read about it at [tug.org/TUGboat/tb07-2/tb15complete.pdf](http://tug.org/TUGboat/tb07-2/tb15complete.pdf) starting on page 93.]

<sup>1</sup> [www.computerhistory.org/collections/search/](http://www.computerhistory.org/collections/search/)

<sup>2</sup> [www.computerhistory.org/revolution/calculators/1/1](http://www.computerhistory.org/revolution/calculators/1/1)

<sup>3</sup> [www.computerhistory.org/revolution/calculators/1/42](http://www.computerhistory.org/revolution/calculators/1/42)

<sup>4</sup> [www.computerhistory.org/revolution/birth-of-the-computer/4/82/334](http://www.computerhistory.org/revolution/birth-of-the-computer/4/82/334)

<sup>5</sup> [www.computerhistory.org/revolution/real-time-computing/6/120](http://www.computerhistory.org/revolution/real-time-computing/6/120)

<sup>6</sup> [www.computerhistory.org/revolution/mainframe-computers/7/161](http://www.computerhistory.org/revolution/mainframe-computers/7/161)

<sup>7</sup> [www.computerhistory.org/revolution/supercomputers/10/7](http://www.computerhistory.org/revolution/supercomputers/10/7)

<sup>8</sup> [www.computerhistory.org/revolution/input-output/14/347](http://www.computerhistory.org/revolution/input-output/14/347)

<sup>9</sup> [www.computerhistory.org/revolution/personal-computers/17/312](http://www.computerhistory.org/revolution/personal-computers/17/312)

<sup>10</sup> [www.computerhistory.org/revolution/the-web/20/391](http://www.computerhistory.org/revolution/the-web/20/391)

<sup>11</sup> [www.computerhistory.org/makesoftware/exhibit/](http://www.computerhistory.org/makesoftware/exhibit/)

<sup>12</sup> [www.computerhistory.org/exhibits/pdp-1/](http://www.computerhistory.org/exhibits/pdp-1/)

<sup>13</sup> [www.computerhistory.org/exhibits/ibm1401/](http://www.computerhistory.org/exhibits/ibm1401/)

<sup>14</sup> <http://www.ed-thelen.org/RAMAC/>