Hardware Steve’s Used

- High school 1976
  - PDP 11 installed by Digital Equipment Corp VP
  - Basic programming and paper tape
- Boston College 1976-1980
  - IBM mainframe on punch cards (deck in h2o)
  - Atari 800 computer with TV, 1200 baud modem cassette tape player for programs basic
  - Remote access to MSU mini computer via dialup and vt100 screen (24 lines x 72 characters)
  - Remote access to UM computer for project
- Ohio State 1982-1987 (1 year in Columbus)
  - Research project Algorithmic spec and programming in C on PDP11/44
  - PCL Network (Parallel Communication Link)
  - DEC shipped a paper tape machine to install software
Keypunch
Monitors for Mainframe
Keypunch – Sorter
Keypunch – Card Duplicator
DEC Writer
PDP 11/44
Disk and Disk Packs
Disk and Disk Packs
PAPER TAPE
READER
Another Version of Reader
Atari Images
Atari Images

The cartridges are very handy, just plug 'em in and go! Technologically, there's not much to them, just some hardware with the program already burned into them.
Atari Images

Couldn’t Afford Disk Drive
# Atari Images

## Partial History of the Atari Computers

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>196?:</td>
<td>As an engineering student at the University of Utah, Nolan Bushnell liked to sneak into the computer labs late at night to play computer games on the university's $7 million mainframes.</td>
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<td>1972:</td>
<td>Bushnell founded Atari with $250 of his own money and another $250 from business partner Ted Dabney. They then created and commercialized the world's first commercial video game, Pong. Bushnell was 27 years old.</td>
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<td>1977:</td>
<td>Atari introduces the Atari Video Computer System (VCS), later renamed the Atari 2600</td>
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<td>1978:</td>
<td>December - Atari announces the Atari 400 and 800 personal computers.</td>
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<tr>
<td>1979:</td>
<td>October - Atari begins shipping the Atari 400 and Atari 800 personal computers.</td>
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<td>1979:</td>
<td>December - Atari produces the first coin-operated Asteroids game machine.</td>
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<td>1981:</td>
<td>May - Atari announces the 8KB Atari 400 is being discontinued.</td>
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<td>1982:</td>
<td>January - Atari begins shipping all Atari 800 units with GTIA graphics chips, allowing three more graphics modes than previously.</td>
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<tr>
<td>1983:</td>
<td>January - Atari introduces the 1200XL home computer.</td>
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Atari Images

- **1983: May** - Atari offers a US$100 rebate on the Atari 800, bringing its retail price to below US$400.
- **1983: June** - Atari introduces the Atari 600 XL.
- **1983: June** - Atari introduces the Atari 800 XL, with 64 KB RAM.
- **1983: June** - Atari introduces the Atari 1450 XL, with built-in 300 bps modem.
- **1983: June** - Atari introduces the Atari 1450 XLD, with built-in 300 bps modem and disk drive.
- **1983: October** - Atari begins shipping its XL computers.
- **1983** - Atari cancels production of the Atari 1200XL, due to compatibility and other problems.
- **1984: July** - Jack Tramiel, President of Commodore International, leaves Commodore in January and buys Atari.
- **1984** - Atari introduces the Atari 7800 ProSystem.
- **1985: January** - Atari introduces the 65XE, for US$120.
- **1985** - Atari introduces the 130XE, with 128KB RAM.
- **1985** - Atari introduces the 130ST for US$400.
- **1985** - Atari introduces the 520ST for US$600.
- **1987: January** - At the Winter CES, Atari announces a US$1500 laser printer.
- **1988: September** - Atari introduces the Atari TT.
- **1989** - Atari Computer introduces the Portfolio, a 1-pound DOS-based PC, which runs on three AA batteries. Price: US$400

Source: [Chronology of Events in the History of Microcomputers](#)
Hardware Steve’s Used

- Naval Postgraduate School 1983-1987
  - Two multi-computer architectures
  - PDP11/44, VAX, point to point network (PCL), 64k virtual memory, 128 k physical overlays
  - 1st generation Unix Workstations
  - $250K for 8 workstations
  - 1st use of Ethernet but no broadcast capability
  - Note: Computer for Remote Access had 0/1 Switches for Rebooting when Problems!

- UConn 1987-present
  - DEC rainbow PC
  - Sun Microsystems workstation, $20,000
  - Black and white, 15in screen, no memory
  - Connected to server, UNIX, email, troff, etc.
DEC VAX 780
DEC VAX 780
DEC VT100
DEC RAINBOW PC
Floppy Disks
SUN SERVER