Expanding the interaction space

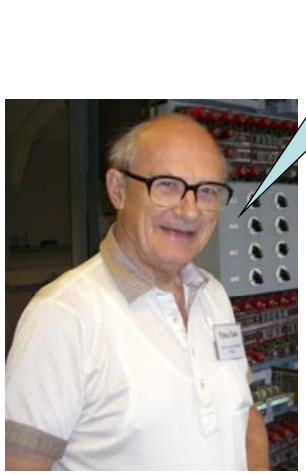
Noting the trends

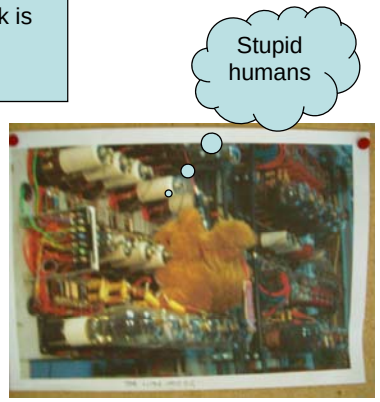
- The changes in computers have been phenomenally fast
  - what are the trends
    - Connectedness
    - Power
    - Size
    - ‘intelligence’
    - Bandwidth ~ communications channels
  - Is the past a predictor for the future?

The first electronic computer

http://www.bletchleypark.org.uk/

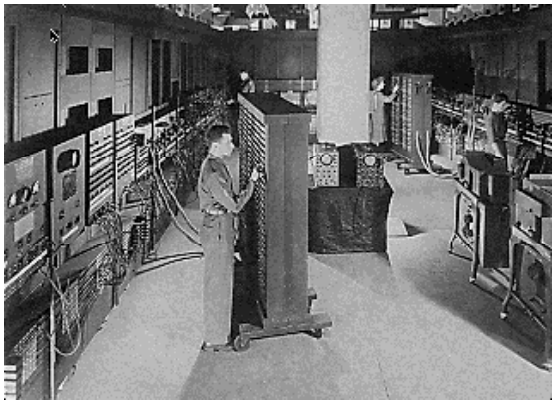
Hci?



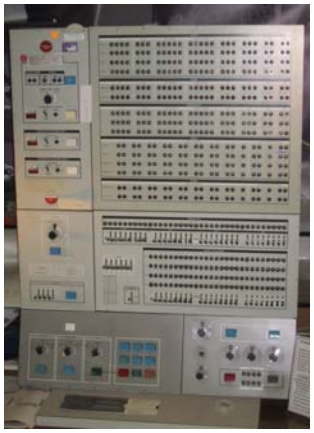


Post War

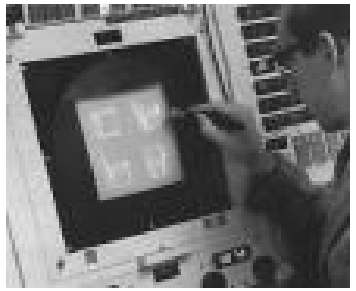
- The ENIAC
  - From http://ei.cs.vt.edu/~history/ENIAC.Richey.HTML



1960s/1970



IBM 360
- card/paper tape input
- printed output



1962 – Sutherland's Sketchpad

~1964 – Engelbart's Mouse

1980s

- PC
  - Screen, keyboard and mouse
- These really were personal computers
  - Very limited connectivity
  - Large organizations had networks
  - Home computers generally stand-a-lone

IBM PC 1981

Zerox Star 1981

1990s

- Connectivity
- Games controllers
- Mobile computing
- Cell phones

2000s

- Merging of phone/computer
- Video phones
- Ubiquitous computing
- High speed connections
- Connected anywhere all the time
- More computing power in smaller and smaller devices

2000s

- Wider range of interactions
  - Originally just visual text
  - Input vrs Output
  - New input devices
  - New output devices
  - Discrete data vrs continuous data
  - New formats
  - New challenges

What does all this mean?

- We can communicate across time and space in ways we have never been able to before
- Digital Natives, Digital Immigrants
  - By Marc Prensky http://www.marcprensky.com/writing/
- Are new generations are learning/working/communicating differently?
- How fast do humans evolve/adapt?

As Researchers

- Endless opportunities
  - Understanding the current state of social/technical interface
  - Using new technology to better understand people
  - Developing and extending new technology
- Endless challenges
  - Many of the seemingly simple problems are amazingly difficult!