

HCIN-722

MobileHCI

Dr. Daniel Ashbrook
daniel.ashbrook@rit.edu

Today

- Project updates
 - One person from each team:
 - progress so far
 - problems you've encountered
 - what's next for your team
- Discussion
 - Chapter 6: Inspired by Materials
 - If time: Wearable Computing

Chapter 6: Inspired by Materials

- How are haptics used now? How can they be better used?
- Nonvisual I/O on your phone?
- NFC/RFID?
- Gimmicky or good?

SIMON & IMOGEN'S HOUSE

© Durrell Bishop 1992

PLANKTON POPULATIONS



► Outline

WEARABLES: WHAT & WHY?

Form Factor & Ergonomics

Wearable I/O

UX Challenges in Wearables

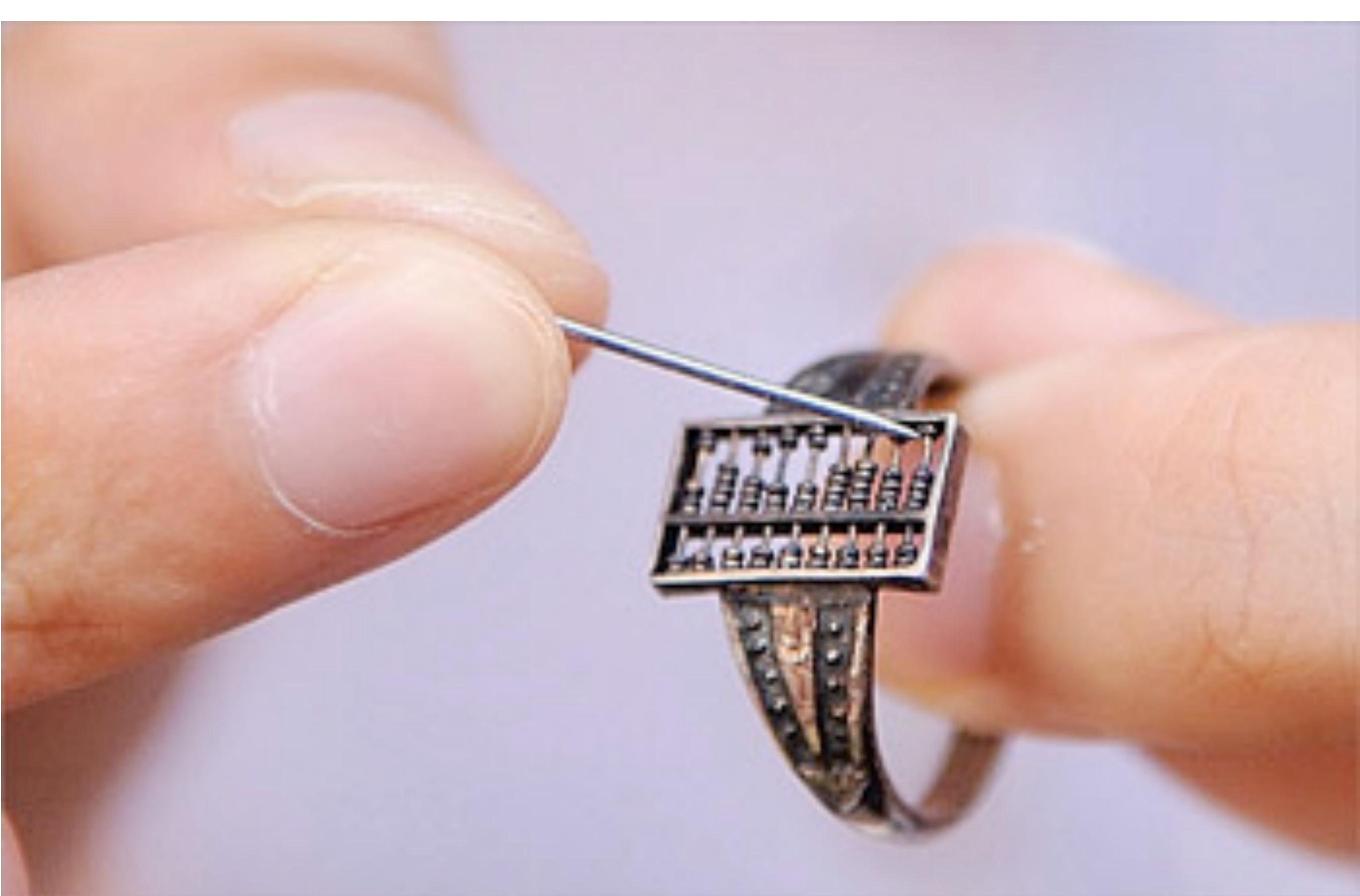
WHAT IS A WEARABLE COMPUTER?

CHARACTERISTICS

- Always ready
- Senses & reacts; can act proactively
- Communication tool
- Respects wearer's attention
- Intimate & personal



HISTORY OF WEARABLE COMPUTING









ROBERT HOOKE
1635 - 1703



“The next care to be taken, in respect of the Senses, is a supplying of their infirmities with Instruments, and as it were, the adding of artificial Organs to the natural... and as Glasses have highly promoted our seeing, so 'tis not improbable, but that there may be found many mechanical inventions to improve our other senses of hearing, smelling, tasting, and touching.”

— *Micrographia*, 1665





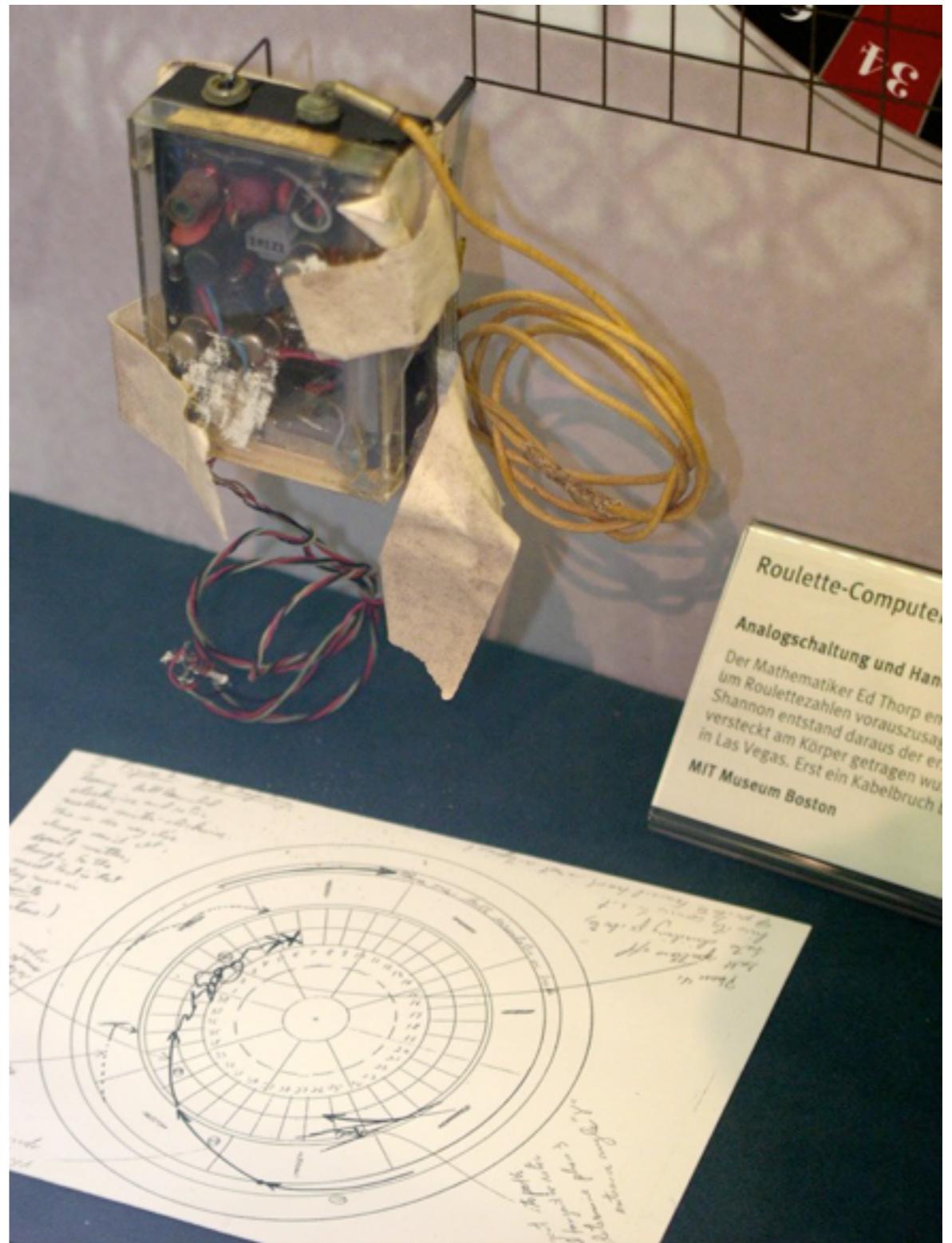
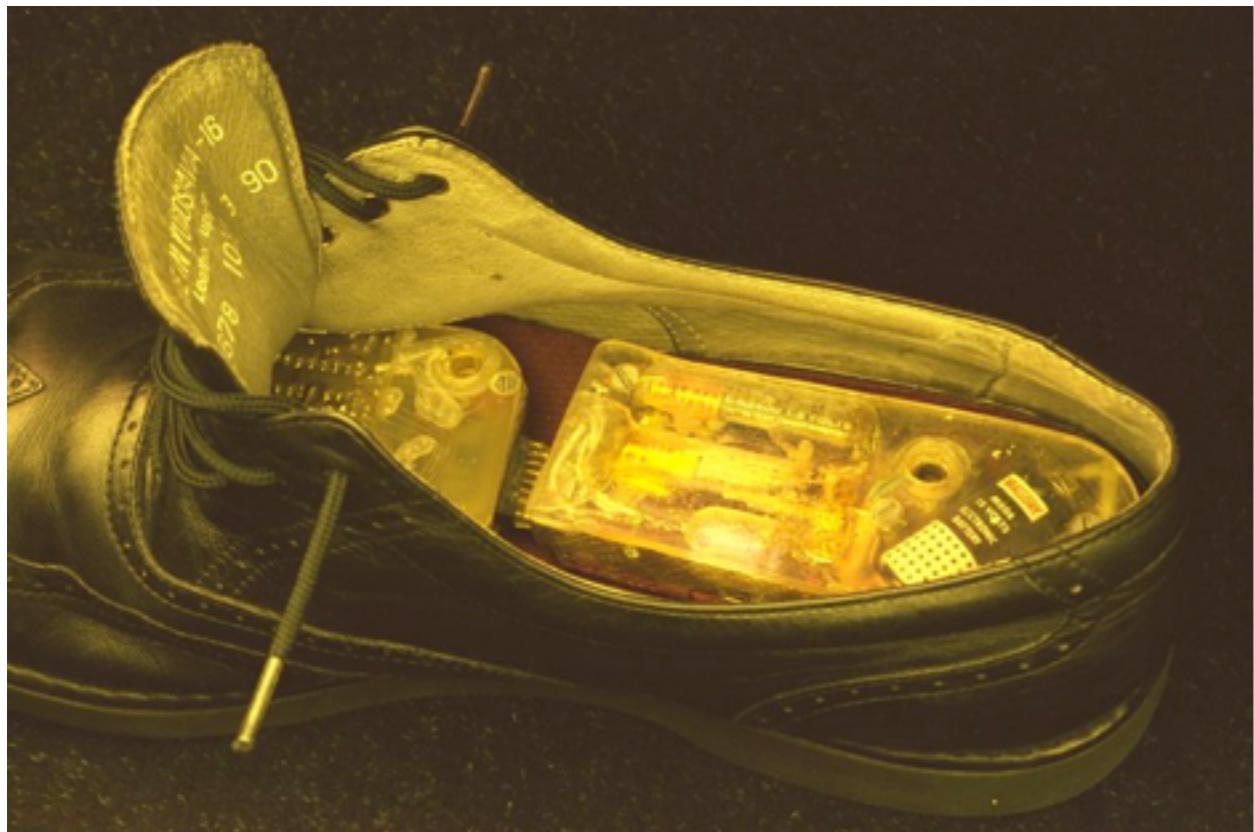


VANNEVAR BUSH

The camera hound of the future wears on his forehead a lump a little larger than a walnut. The cord which trips its shutter may reach down a man's sleeve within easy reach of his fingers. A quick squeeze, and the picture is taken. ... Is this all fantastic? The only fantastic thing about it is the idea of making as many pictures as would result from its use.

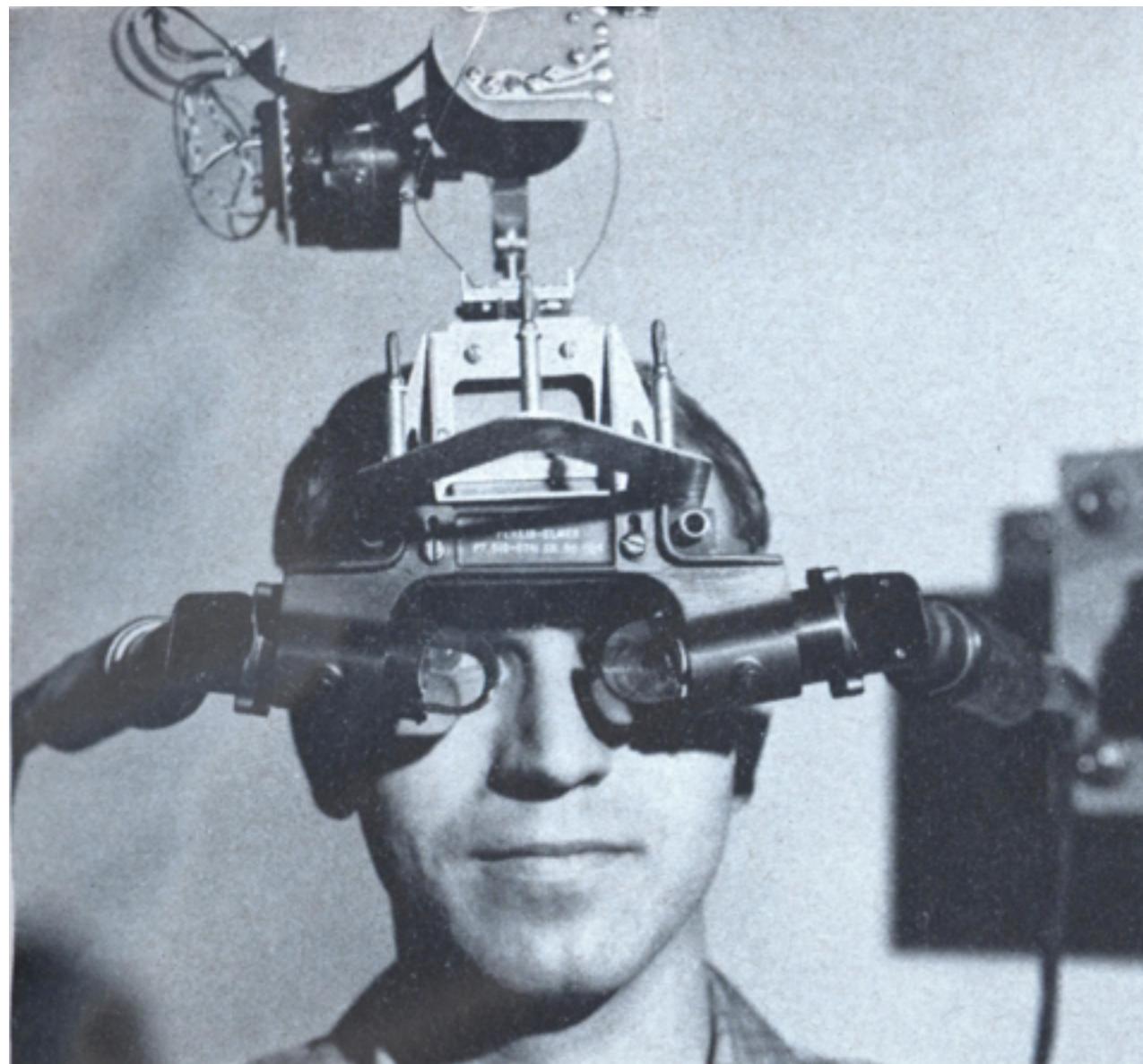
“As We May Think”—*The Atlantic Monthly*, 1945

THE FIRST WEARABLE COMPUTER



Ed Thorpe & Claude Shannon
1966

SWORD OF DAMOCLES



IVAN SUTHERLAND
1966

HP CALCULATOR WATCH

1977

