

MSc III Sem – Life Sciences

Course – Bioinformatics

Introduction to Computers

Major Inventions Computers

- First assembled **computer**: British **Charles Babbage** between 1833 and 1871 (father of the computer)
- First **programmable computer (Z1)** was created by German **Konrad Zuse** between 1936 and 1938.
- Steve Wozniak and **Steve Jobs** invented the **Apple** computer 1976.
- **Microsoft** was founded by **Bill Gates** and Paul Allen in 1975
- **Google** - **Sergey Brin** 1995

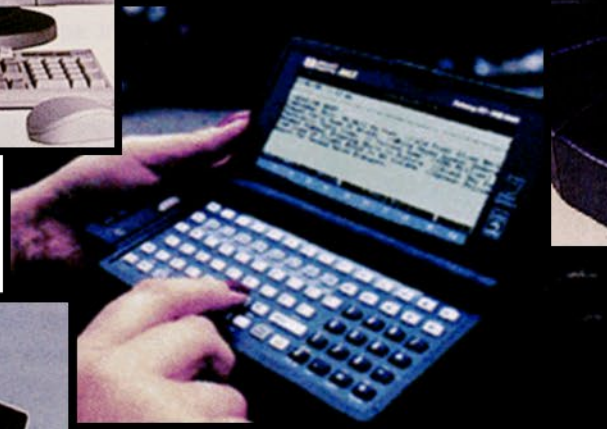
Types of Computers



Workstation



Supercomputer



Palmtop Computer

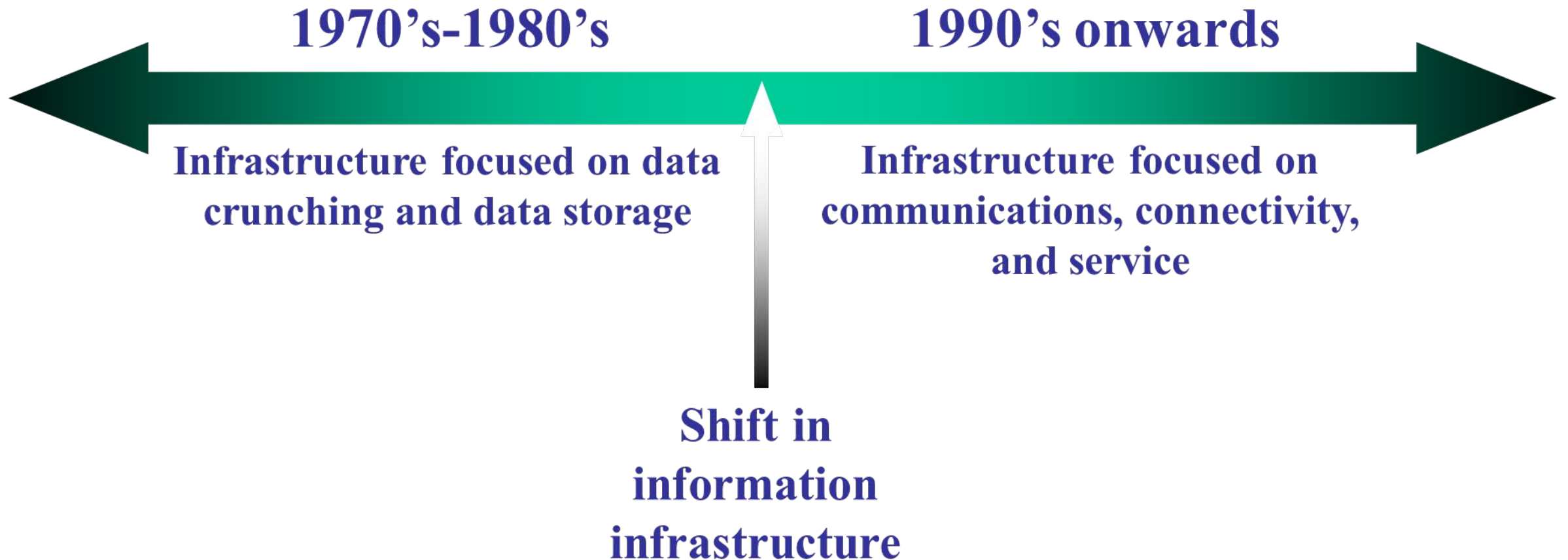


Laptop Computer

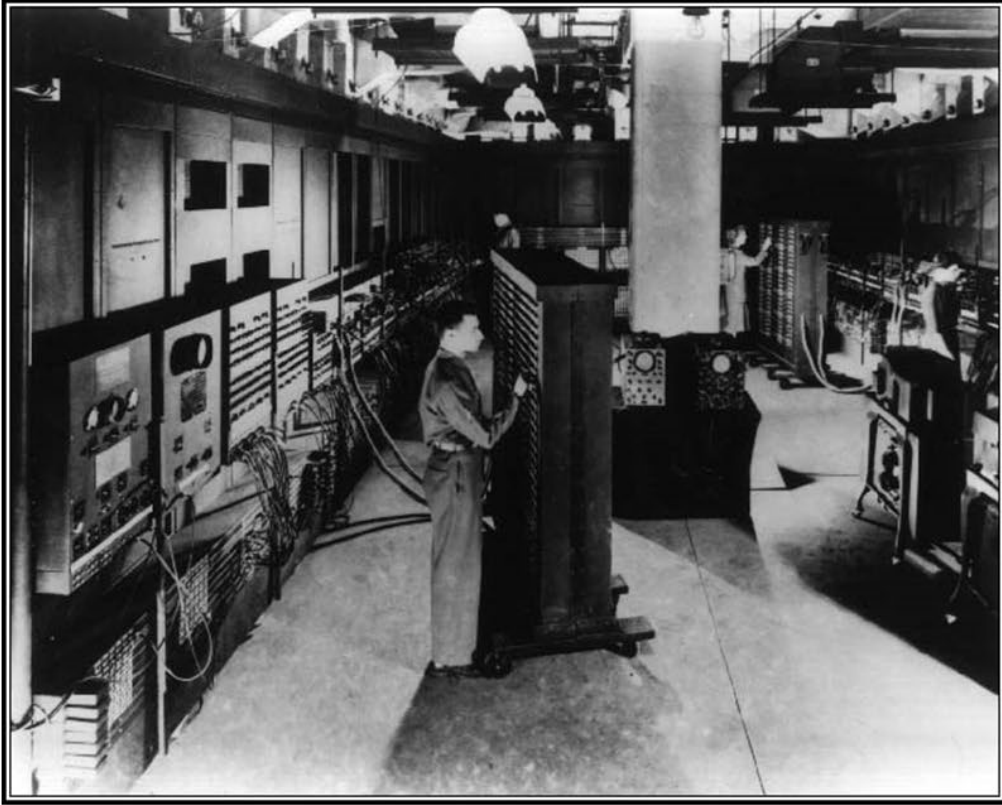


Personal Data Assistant

The Information Age Timeline

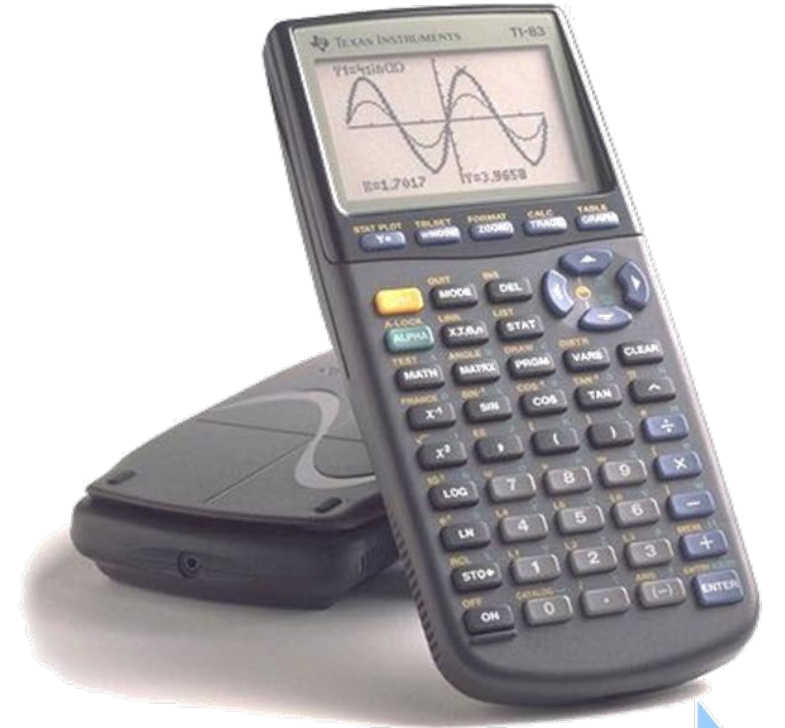


Progress of Technology through Time



ENIAC

Composed of 17,000 vacuum tubes, 70,000 resistors, and 10,000 capacitors, the ENIAC (Electronic Numerical Integrator and Computer) weighed over 30 tons and took up 1800 square feet of floor space. Completed in 1945, the ENIAC was used for ballistics work and later on for weather prediction.



Current Technology

Today's technology uses vast numbers of electronic components in the form of miniaturized integrated circuits contained on silicon chips. Modern day desk calculators exceed ENIAC's computational power and speed by far.

Personal and Multimedia Computers

Apple
computer
created

DOS becomes
the industry
standard

IBM first
micro-
computer

Macintosh
computer
created

IBM
introduces
first laptop
computer

IBM and
Microsoft
release the
OS/2
operating
system

Microsoft
releases
Windows 3.0

Multimedia
computers and
personal data
assistants
developed

1976

1980

1981

1984

1986

1988

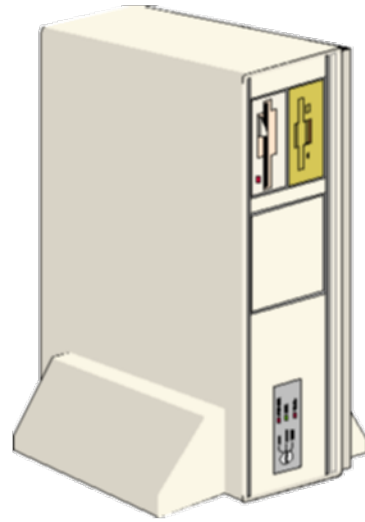
1990

1994



Components of a Computer System

IPO Cycle (Input- Process- Output)

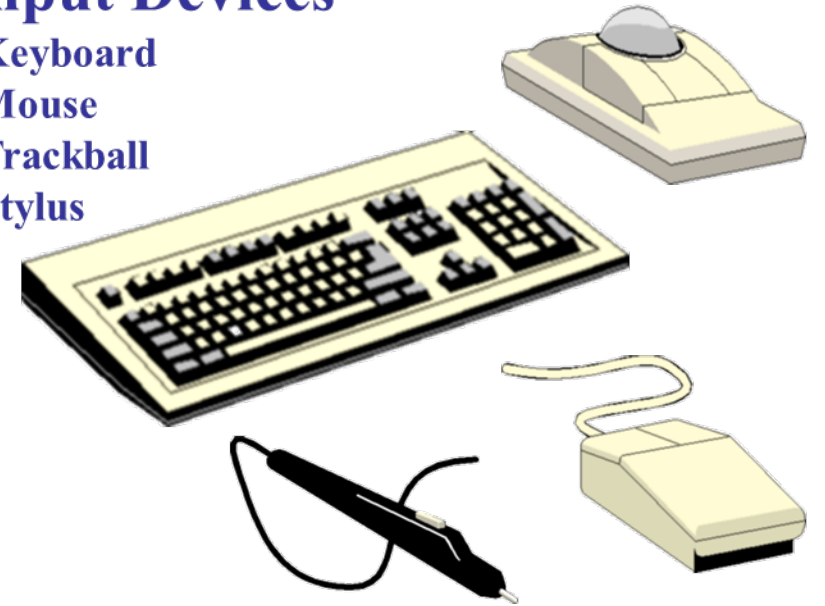


Central Processing Unit (CPU)

- Microprocessor
- Storage Devices (Hard Drives & Floppy Drives)

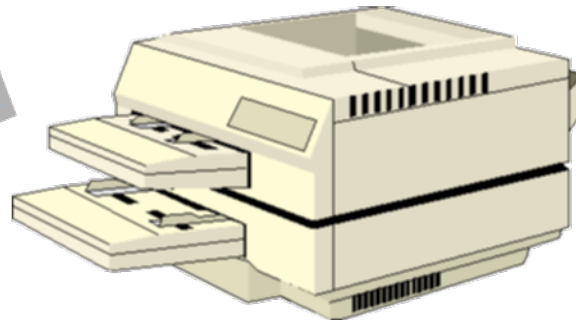
Input Devices

- Keyboard
- Mouse
- Trackball
- Stylus



Output Devices

- Monitor
- Printer



Components of a Computer System

Central Processing Unit (CPU)

- Microprocessor – core unit
- Storage Devices (Hard Drives, Floppy Drives, Pendrives, CDs/DVDs/BluRay Disks)

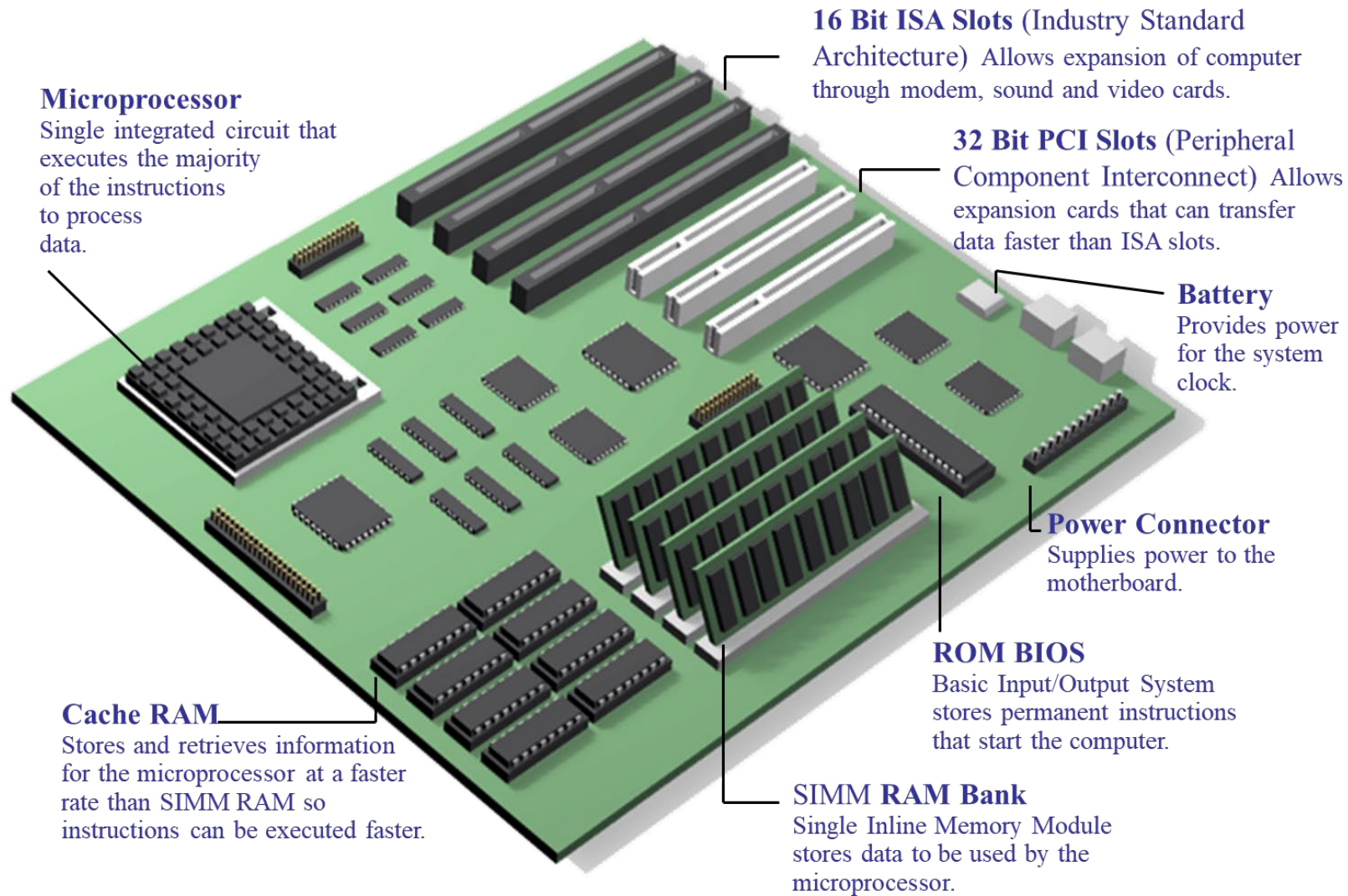
Peripherals / Input Devices

- Keyboard
- Mouse
- Trackball
- Stylus
- Joystick

Output Devices

- Monitor
- Printer

Major Components of a Motherboard



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