

Computer Architecture

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Bibliography

Computer Architecture, A Qualitative Approach, 3rd Ed.,
Hennessy, JL and Patterson, DA, pub. Morgan Kaufmann, £37.
Operating Systems, Internals & Design Principles, 3rd Ed.,
Stallings, W, pub. Prentice Hall, £30.

Both are thick (1000 pages and 800 pages respectively), detailed, and quite technical. Both are pleasantly up-to-date.

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History

History: to 1970

- 1951** Ferranti Mk I: first commercial computer
UNIVAC I: memory with parity
- 1953** EDSAC I 'heavily used' for science (Cambridge)
- 1954** Fortran I (IBM)
- 1955** Floating point in hardware (IBM 704)
- 1956** Hard disk drive prototype. 24" platters (IBM)

- 1961** Fortran IV
Pipelined CPU (IBM 7030)
- 1962** Hard disk drive with flying heads (IBM)
- 1963** CTSS: Timesharing (multitasking) OS
Virtual memory & paging (Ferranti Atlas)
- 1964** First BASIC
- 1967** ASCII (current version)
GE635 / Multics: SMP (General Elect)
- 1968** Cache in commercial computer (IBM 360/85)
Mouse demonstrated
Reduce: computer algebra
- 1969** ARPAnet: wide area network
Fully pipelined functional units (CDC 7600)
Out of order execution (IBM 360/91)

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