The Evolution of Information Technology: Origins

Before the beginning: process automation

Before the beginning: tabulation

Before the beginning: automated calculation

Electronic digital computer

Ian King, Sr. Field System Engineer
Viking Computer Museum
Qutara, Inc.
Programming the ENIAC

Program? Data?
The von Neumann approach

0010 0101 0001

593_{10}

‘IQ’

TAD 0001

\[ \text{two's complement add, } AC \leftarrow (\text{location } 0001) + AC \]

Stored Program Electronic Digital Computer

UNIVAC I

Stored Program Electronic Digital Computer

UNIVAC I
UNIVAC I

And what of IBM?

IBM’s greatest hits

IBM System/360

IBM System/360
Outliers: Whirlwind

Outliers: SAGE

Outliers II: Compatible Time Sharing System
Under the hood: working store
- Acoustic delay lines
- Williams tubes

Building the machine: working store
- Magnetic drum

Building the machine: working store
- Magnetic core

Questions?