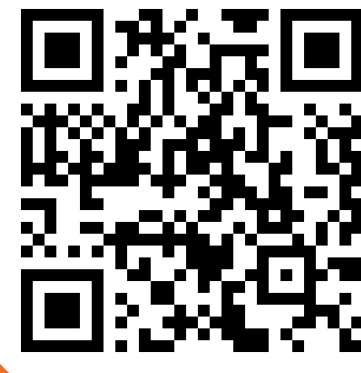## computers

Computers are most fragile artefacts. Since the post-WWII years, information technologies have been developing quickly: hardware is still superseded year by year, while software encodings become obsolete and their storage supports unreadable.

public

To engage public in the understanding of the social history of computing, museums have to let their visitors experience the old computers – machines made to be used. A hands-on approach allows people to connect with the cultural and technological context faced by the pioneers.

archeology

Yet, preservation of the relics should never be jeopardized. Sometimes there are no relics at all: past machines went lost and only scarce documentation survived. Rebuilding attempts to bring them again to the public require an experimental archeology approach.

G.A. Cignoni
F. Gadducci
G. Lettieri

rebuilding / interacting
at the Museum of Computing Machinery of Pisa

Software simulation is a valuable tool for the researchers for understanding, often re-discovering, the inner workings of an old computer and to experimentally validate its rebuilding hypothesis. When the rebuilding project succeeds, the virtual, albeit accurate and realistic, replica can be used in museum installations, thus letting visitors interact with the past, once forgotten, machine.

Museo
degli Strumenti per il Calcolo

IN SUPREMÆ DIGNITATIS
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hmr

The Museum preserves the mortal coils of a large computer made in Pisa in 1961, well known as the CEP (for Calcolatrice Elettronica Pisana). Before that machine, the University had built the MR (for Macchina Ridotta): completed in 1957 it was the very first Italian computer. After two years of successful usage, the MR was dismantled and its raw components used for the CEP.

Since 2006, the HMR project, based at the Department of Computer Science of the University of Pisa, has been investigating the history of computing: the research on the MR established its primacy, revealed its state-of-the-art technologies, and allowed the building of its virtual replica.

The MR simulators are now an integral part of the seminars and workshops offered by the Museum. Visitors can interact with the MR and students can even program it gaining a better understanding of computer technologies, past as well as modern ones.

MR57Sim - Manual Control Panel