IEEE Swiss Computing History conference and exhibition

A brief report

Introduction

In the second half of the 20th century, Switzerland was on the forefront of information technology developments.

At the ETH in Zurich, Professor Eduard Stiefel founded the Institute for Applied Mathematics in 1948. After leasing the Zuse Z4 relay computer in 1950, this department developed the ERMETH computer with vacuum tubes and germanium diodes. It performed mathematical and engineering calculations from 1956 until 1963. Later, under the leadership of Professor Niklaus Wirth, the ETH focused on programming languages (ALGOL, Pascal, Modula, Oberon) and high-performance graphical workstations (Lilith, Ceres).

At the EPF in Lausanne, Professor Jean-Daniel Nicoud and his team of students first developed transistor-based calculators. With the first microprocessors, the Laboratory of microcomputers built successive generations of SMAKY personal computers, demonstrating state-of-the-art performance. The team pioneered computer graphics, Local Area Network, multiprocessing, real time computing and user-friendly peripherals. These machines were primarily sold for educational purposes. Many software applications and games were developed.

The Swiss industry developed computers for specific industrial applications. Güttinger or Contraves built computers for cartography, defense and accounting. After Bobst Graphics stopped their phototypesetting project, Daniel Borel created Logitech in the Silicon Valley and Switzerland. The success of the computer mice they manufactured enabled the growth of the company. They managed the business cycles by controlling production costs while keeping quality. Anton Gunzinger's Supercomputing Systems AG developed the Gigabooster machine and then specialized in the networking of high-performance computer clusters. Digital Logic, founded by Felix Kunz, was successful worldwide with industrial embedded IBM-compatible personal computers.

The Event

Jean-Daniel Nicoud approached the IEEE Switzerland Life Members, to prepare conferences and an exhibition at the ENTER Technikwelt museum, near Solothurn. His intention was to bring together the engineers who developed these technologies and to keep an historical trace of their contributions.

The event took place on the weekend of 8-9 November 2025, in parallel with the Vintage Computer Festival (VCF), organized by the Vintage Computer Club, Zurich. The very large available space of the ENTER museum allowed for multiple parallel activities, The exhibitors of the VCF demonstrated their hardware and software on rows of tables and a flea market was organized. The IEEE had a temporary exhibition of Swiss computers mirroring the conferences that took place in two parallel tracks.

ENTER, VCF and IEEE organizers worked together for the success of this gathering. About 1000 people joined the event for one or two days. The presenters and attendees greatly appreciated this opportunity to share their experiences of the recent past. Historians shared their studies about the World Wide Web debuts at CERN and about their research on video games developed in Switzerland. Conferences in English, German or French, with slides in English, are recorded and edited. They can be found under: www.youtube.com/@VCFCH/videos