

New Silicon Engine exhibit
Education program kick-off
The Beautiful Fragment model unveiling

Coming Soon:

The Silicon Engine Exhibit

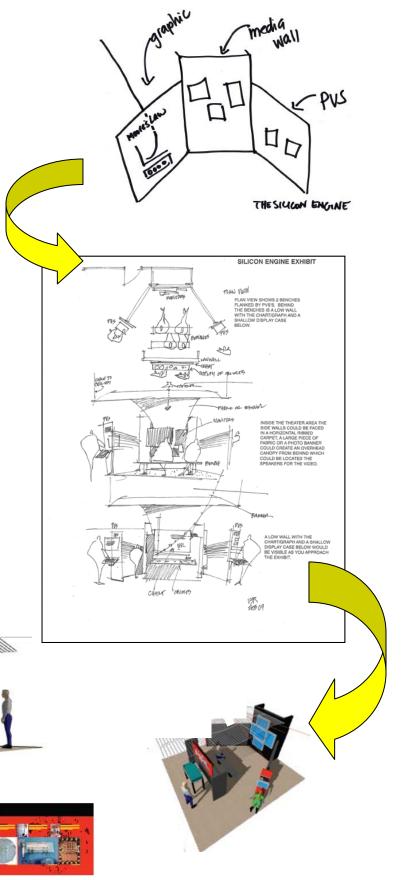
By John Hollar & Kirsten Tashev

THE SILICON ENGINE is a new temporary exhibit planned for the Gallery area of the Computer History Museum and will launch in June 2009. The exhibit is planned to coincide with the "Salute to the Semiconductor," a year-long celebration of the 50th anniversary of the invention of the integrated circuit. The invention of the IC in 1958 by Jack Kilby of Texas Instruments, and its subsequent refinement in 1959 at Fairchild by the team led by Robert Noyce and Jean Hoerni, sparked a revolution in computing. Kilby went on to win the Nobel Prize in 1980 for his work in the field of the integrated circuit.

The lobby exhibit will draw on the Computer History Museum's extensive collection of oral histories of the leading pioneers in the field of semiconductors and microprocessors. It will feature a multi-screen theater airing a continuous showing of a short documentary on the invention of the transistor, its role as a building block of the integrated circuit, the rapid growth of semiconductors and the profound effect these technological breakthroughs have had on modern life.

The exhibit will also feature two personal viewing stations where audiences can select and view multiple excerpts of pioneers discussing their work and its impact.

Major funding for **THE SILICON ENGINE** is provided by the Gordon and Betty Moore Foundation. Additional funding is made possible by Intel Corporation.



CHM Launches Its Education Program

By Lauren Silver, Director of Education

On March 26, the museum hosted its first educators' focus group. About 40 teachers and school administrators from the Bay Area came to meet staff, learn about the museum, and share ideas that will help CHM achieve our goal of creating an outstanding educational program.

The first part of the evening was focused on familiarizing the educators with the people, collections, and resources of the CHM, and to give them a preview of the changes that will be taking place over the next year and a half, as we prepare for—and then open—the new exhibit. After welcoming remarks from John Hollar and Lauren Silver, educators saw a clip from Richard Tedlow's February talk for teens; they were then treated to mini-tours of Visible Storage by docent Al Rozensweig, demonstrations of the Babbage engine by docents Randy and Julie Neff, and time to explore "Masters of the Game" on their own, with help from staff members Fiona Tang, Bob Sanguedolce, and Jim Somers. Throughout the evening, staff and docents were available to answer questions and to help teachers think about how they might incorporate CHM's objects, tours, and website into their curricula.

The highlight of the evening was a set of small-group brainstorming sessions, led by Lauren Silver, Karae Lisle, and Ruthmary Cradler of Educational Support Services, the consulting firm that had helped us develop the focus groups. Participants had a chance to share their thoughts and questions, and we invited them to think creatively about ways in which CHM can make computer history engaging and interesting for students and educators alike. In addition to these ideas, we also heard about the day-to-day realities of school life and the limitations and challenges involved in trying to integrate outside materials, field trips, and museum collaborations into classroom curricula. All of this information will be very useful in helping us create relevant and effective resources for schools.

Overall, the evening was an enjoyable way to launch our education program. By bringing local educators into the museum and talking to them directly about what they need and want, we have begun to create the kinds of relationships that will help us become an important part of the local school community, and that is a great beginning for education at the CHM.



Cabbage Bowling, Best Leprechaun Contests, and the mandatory Guinness beer were on the agenda for the afternoon of March 17th, as the CHM staff took a well-deserved break and celebrated St. Paddy's Day in style. Enjoy these photos of the party.



Marc Weber perfects cabbage bowling technique



Finalists for the Best Leprechaun award





In Memoriam...

Dick Delp

(April 13, 1928 – March 31, 2009)

Dick served as a CHM volunteer from September 2004
to September 2008. During this time he was a valued member of the docent corps and a member of the lecture registration team. Dick is survived by his wife Virginia. Our heartfelt condolences go out to Virginia and the rest of Dick's family.

Recently donated: Scale model of the "Beautiful Fragment"

by Jim Somers

As a special treat during our March Volunteer Saturday, Tim Robinson, the Babbage Project Volunteer Lead, with the assistance of our registrar team, unveiled a recent artifact donation — a non-working, scale model of Babbage's "Beautiful Fragment." The original, which is on display at the Science Museum in London, was created from parts of Difference Engine №1 as a demonstration piece.

The recently donated scale model was created in 1971 by Roberto Guatelli as a retirement gift for T. Vincent Learson, the CEO of IBM. Guatelli also created the reproduction of the Hollerith Census Machine that is currently on exhibit in Visible Storage. (The Guatelli model itself is not currently on exhibit.) In the future, the volunteer program and collections will be collaborating on a regular Volunteer Saturday feature designed to showcase recent, interesting artifact donations.

During the unveiling, Tim used his own meccano version of the "Beautiful Fragment" to show how the original operated. **

See the rest of the photos at www.tinyurl.com/beautiful-fragment

Volunteer Steering Committee March meeting notes

by Peter Samson

We had updates of the following topics:

- Efforts continue on the volunteer website. Bob Sanguedolce, v.p. of Technology, has found a software product called Volgistics which may be suitable to replace the calendar function of the present website. It does not offer a graphic calendar layout, but has a number of volunteermanagement features that we presently lack. Review of its manual is underway. Dave Bennet suggested that there should be a specific "website" for volunteer recruitment that could be referred to in Silicon Valley retiree newsletters, etc.
- · The fate of the Zuse Lounge has been decided; it will stay a lounge, and will be renovated.
- The Restoration Demo room now has a key lock on the door; Front Desk staff have charge of the key. When the room is unattended, it should be locked, with the spotlights on full and the shade lifted. Visitors can see the PDP-1 and 1620 through the window.

Jim Somers sketched out the activities of volunteers over time, in three phases: starting now, interim during the transition (when Visible Storage is closed), and in the future when the "2000 Years of Computing History" exhibit is open:

Public-facing activities

 Education, docents, demonstrations – development and introduction of new Docent Training Program. Our new Education Director, Lauren Silver, will be in charge of this program, drawing on her experience at the Cantor Arts Center at Stanford.





- · Lectures continued development of lecture-specific team.
- · Front of House greeters; in future, also Info Desk and Gift Shop.

Collection activities

- · Registrar continued cataloging (size of team may be smaller, depending on needs).
- · Archives possible growth of small team.
- sigs continued activity: collecting oral histories, documenting the development of their topic areas, and assisting in the design of new exhibits.

Restorations

- PDP-1 now: continued demonstrations; interim: perhaps maintenance only; future: demonstrations resume, probably in new space (to be determined).
- · 1401 continued development of demonstration program.

Other volunteer activities

· To be based on skills of volunteers

The transition poses a number of challenges for the volunteer program, including training for more general audiences, recruitment to broaden the range of docents, and continued engagement with the present volunteers, such as docent opportunities during the transition period. At next month's meeting we will nominate new VSC members and discuss the purposes and structure of the Committee going forward. %

Next regular meeting: April 22nd, 4:30 pm. The full minutes are posted in a binder in the Zuse Lounge, or available online at www.tinyurl.com/vsc-mar2009





Upcoming volunteer opportunities

Volunteer Days

Saturday, May 9th, 9 am-3 pm (Shoreline) Saturday, June 20th, 9 am-3 pm (Milpitas)

Volunteer orientation

Saturday, May 2nd, 10-11 am Saturday, June 6th, 10-11 am

Greeter training

Saturday, May 16th, 10-11 am

Soundbytes lecture

Judy Estrin: "Closing the innovation gap"

Thursday, May 12th, noon-1:30 pm

Statistics

March 2009

Total open hours visitors: 2,060
Total exhibit visitors during events: 585
Babbage demo attendance: 1,132
Tour attendance: 675
PDP-1 attendance: 81
D.P. tour/1401 demo attendance 17

Total visitor donations: \$1,524.61 Total store sales (gross w/tax): \$4,628.71

February 2009

Total volunteer hours: 1,185
Active volunteers: 103
Total value of February volunteer hours
(value provided by Independent Sector):

\$26,034.45



Spacewar! Wizard



Dag Spicer pointed us to this very cool picture of **Vint Cerf** playing Spacewar! on the PDP-1 at the museum in May 2007.

Outstanding Media Coverage

A look at the impressive list of publications the Computer History Museum has been featured in just the past month.

The New York Times

3.26.09 Dag Spicer is interviewed by David Pogue on Data Rot: http://pogue.blogs.nytimes.com/tag/dag-spicer/?scp=2-b&sq=Computer+History+Museum&st=nyt

THE WALL STREET JOURNAL.

3.26.09 Alex Bochannek quoted in article on cloud computing: http://online.wsj.com/article/SB123802623665542725.html



4.2.09 Smithsonian.com story on Charles Babbage and the Difference Engine #2 mentions the CHM exhibit:

http://www.smithsonianmag.com/science-nature/Booting-Up-a-Computer-Pioneers-200-Year-Old-Design.html

The Boston Globe

4.5.09 CHM is featured in the story "Down in the Valley of computer archeology":

http://www.boston.com/travel/getaways/us/california/articles/2009/04/05/down_in_the_valley_of_computer_archeology/





New Hires

Aimee Gardner joined the Technology team in April as a Video Researcher

This Month in History

April 11, 1936: Computer Designer Zuse Files for Patent
German computer pioneer Konrad Zuse files for a patent for the
automatic execution of calculations, a process he invents while working
on what would become the Z-1, Germany's first computer. In the patent
application, Zuse offers the first discussion of programmable memory,
using the term "combination memory" to describe breaking programs
down into bit combinations for storage. This is the first device to
calculate in binary with translation to decimal. Zuse goes on to build a
series of computers.

Trivia Question

April Question

How did the Winchester drive get its name?

March Question:

Which of the following facts are true about Grace Hopper:

- 1. Served as a part of the Mark I computer programming staff.
- 2. Was an employee of the Eckart-Mauchley Computer Company.
- 3. Is famous for her *nanoseconds* visual aid.
- 4. Has been attributed with first saying, "It is easier to ask forgiveness than it is to get permission."

Answer: All are true.



The energetic Marketing & Development team celebrate Hat Day (?) Back Row: David Bledsoe, Gail Easton, Fiona Tang, Lynne Van Tilburg. Front Row: Shelley Bergin, Carina Sweet, Karae Lisle, Dorothy Tanuvasa

The Editors Desk

Editors: Jim Somers, Marcin Wichary, Gary Matsushita This month's contributors: John Hollar, Peter Samson, Lauren Silver, Jim Somers, Dorothy Tanuvasa, Kirsten Tashev, and Marcin Wichary