The Computer Museum NEWS
Special History Center Issue
Winter 1997

Museum Opens Computer History Center in Silicon Valley

On an Indian-summer day last September in Mountain View, Calif., four 18-wheelers completed their cross-country trek to deliver 100,000 pounds, or one-half, of the Museum's collection from Boston to the NASA Ames Research Center. The Museum was not turning its prize jewels over to the government, but, rather, NASA was generously donating valuable warehouse space for the collections. The Museum was taking a giant leap forward in advancing the third leg of its mission to be "an international resource for research into the history of computing." The warehouse space on NASA's Moffett Field was the beginning of the creation of The Computer Museum History Center.

Photograph: © Louis Fabian Bachrach

The Museum's collection has plenty of room to spread out in its new home at NASA Ames Research Center.

The Computer Museum History Center's charter is to continue to build the 15-year-old collection proactively and be a resource for research into the history of computing. At the same time, the Center and the Museum will liberally share the collections, and a historical context will continue to infuse Boston exhibits. The collection is also available for use by publications as well as scholars, educators, researchers, engineers and journalists.

The Epiphany

Initial underwriting for the Center was provided by Gwen and Gordon Bell and Dr. Leonard J. Shustek. Shustek is co-founder and fellow of Network General Corporation, a Computer Museum board member, and serves as chairman of the Center. Shustek became involved in the History Center project, donating time and resources, because of a need he discovered while teaching a computer science course at Stanford University. "Once a week I would bring a historical 'show-and-tell' item to my class, like a vacuum-tube module or a core plane, and it produced puzzled but interested faces," Shustek says. "I realized that the history of computers is no longer being learned, not even by the specialists-to-be. I had an epiphany: In a generation we could lose the knowledge of how the computer revolution came to be, unless we act to preserve it."

Shustek joined the "work in progress," playing a key role in establishing the History Center. He was at the Moffett Field warehouse—Building 126, a former furniture showroom—the day the moving vans arrived. Taking in the collection was a back-breaking reminder of how far the industry has come. All the raw processing power in those four vans can now be held in two hands.

Collection Highlights

Some of The Computer Museum History Center's collection was donated by NASA Ames, such as the ILLIAC IV supercomputer and Robert Morris' Worm. Artifacts include a complete collection of Seymour Cray's computers from NTDS 17 (1957) to the Cray 1 (1976); Whirlwind (1951); UNIVAC 1 (1952); the PDP-1 with original *SpaceWar* game (1962); and more than 100 different early personal computers. Recent additions include the original MIPS wafer manufactured at Stanford University and Frederico Faggin's prototype of the Busicom calculator using Intel's 4004 chip, the first microprocessor.

The artifact collection has been organized into visible storage and is now available for viewing by appointment only. The rest of the collection is due to be moved within the year. Plans are in progress to identify a permanent Computer Museum History Center facility in Silicon Valley to house the collections, historic exhibitions, research and administrative offices.

After finding a permanent facility, the Center will present artifact-rich, *Scientific American*-level exhibits directed toward a

(continued on p.4)

The Computer Museum History Center

The Computer Museum has two overlapping but distinct missions. The word "inspire" sums up the first. Since 1984, the Museum has created dynamic exhibitions and programs to get people excited about computing—its history, technology, and uses. *People and Computers: Milestones of a Revolution*™ uses elaborate vignettes that include original artifacts to stimulate visitor interest in the history of computing. *The Walk-Through Computer*™ uses the device of unusual scale to motivate guests to learn computer anatomy, and *Robots & Other Smart Machines*™, *The Networked Planet*™, *The Best Software for Kids Gallery*™, and *Tools & Toys*™ present computer uses via dozens of engaging hands-on stations. The Museum continues to build unique educational exhibits, with *The Virtual FishTank* (see page 5) now under development.

> **"The History Center is the most significant development since the move to Boston 12 years ago!"**

The second mission is summed up in the word "preserve." The Museum's historical collections exist to keep a primary record of the history of computing in perpetuity. In building up and maintaining the collection, our concern is to ensure that future generations will find in our collection a rich record of the development of computing from the beginning of general-purpose electronic computing in the 1940s. It is sometimes assumed that an item acquired by the Museum will be placed on display. In practice, all collections-based museums display only a small fraction of their holdings. Exhibits are developed for specific audiences and to help present a specific topic or theme. In contrast, objects are held in collections if they fit the institution's collections policy, which includes considerations not directly linked to an object's suitability for display.

While the Museum has always pursued both aspects of its mission in parallel, the 1983 decision to move to downtown Boston and create a destination appealing to a broad public was driven by the desire to expand our educational impact. Through the efforts of the Museum's West Coast Board members, the Museum now has an opportunity to pursue its "preservation" and historical mission with new vigor. The article on page 1 describes the developments that led to the founding last fall of a new division of the Museum, The Computer Museum History Center in Silicon Valley. This is the most significant development at the Museum since the move to Boston 12 years ago!

The History Center will become the primary site for the Museum's collecting and historical activities. Thanks to a generous loan of space from the NASA Ames Research Center at Moffett Field, the Museum has space to accommodate a growing collection. This has already made it possible for the Museum to obtain several important acquisitions, such as the supercomputer collection from Lawrence Livermore Laboratory. Proactive collecting will be the History Center's top priority. By the year 2000, the Museum's goal is to secure a building to house the collections, exhibits, researchers, and collections staff. The Museum is currently testing the feasibility of this goal.

The creation of the History Center strengthens the Museum's ability to create unique exhibits in Boston, in other venues (recent examples include the William H. Gates Computer Science Building at Stanford University and COMDEX), and in an eventual publicly accessible History Center in the Valley. Exhibits at the History Center will be aimed principally at interested adults and scholars, while those in Boston will continue to target a broad-based public.

An important feature of Computer Museum exhibits is the way in which we combine a rich artifact-based treatment of the history of a theme together with interactive exhibits about the current state of the art. A good example is the *Robots & Other Smart Machines* gallery, which includes the Robot Theater in which many one-of-a-kind research robots are displayed in a multi-media performance. Adjacent to the theater are hands-on exhibits about current expert systems, natural language understanding and robot sensing. The creation of the History Center strengthens the breadth and depth of the Museum collections, and with it our ability to include key historical elements in thematic exhibits. The perspective of history casts into sharp relief the astonishing technological changes over the past 50 years of computing. Thus, through preservation, the Museum gains an ability to inspire its visitors, and our two missions come together!

Oliver Strimpel
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Editors: Gwen Bell, Gail Jennes, Mary McCann
Photo processing courtesy of Boris Image Group

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General Information	(617) 423-6758
Group Visits	1-800-370-CHIP
Museum Offices	(617) 426-2800
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Functions	x340
Membership	x432
Museum Store	x306
Public Relations	x341
Volunteer Program	x433
Fax (Museum Offices)	(617) 426-2943
History Center Offices	(408) 562-7919
Collections	(408) 562-7937
The Computer Bowl	(408) 562-7915
Fax (History Center)	(408) 988-2874

For Museum staff, e-mail: ***<lastname@tcm.org>***
For general Museum information, e-mail: ***<computer_info@tcm.org>*** with ***request*** in subject line and ***send help instructions*** as the body of the message.

Via World Wide Web:
<http://www.tcm.org/>

Summer: Open daily, 10am-6pm, through Labor Day

Winter Hours: Open Tuesday-Sunday, 10am-5pm. Closed Mondays, except Boston School holidays and vacations. Closed Thanksgiving, Christmas, and New Year's Day.

Admission: Adults $7.00; students, children five and up, and seniors $5.00. Half price Sunday 3-5pm. Free to Museum members and children four and under.

Meet the Board: Len Shustek

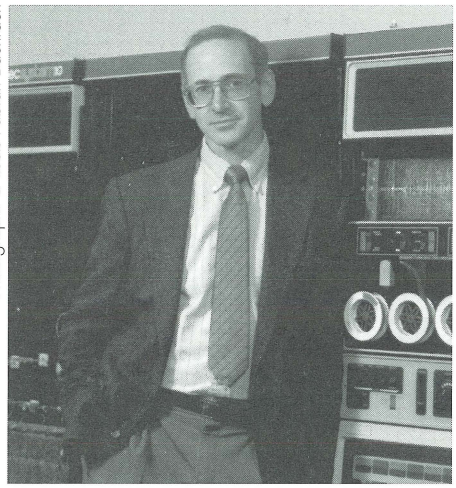
For Dr. Leonard Shustek, a step into the past led him to discover the riches of The Computer Museum. "Two years ago, I got to teach a course in computer architecture at Stanford that I had taken as a graduate student 23 years earlier," Shustek begins. "Needless to say, there were a few changes in content that made reading my old notes less than adequate preparation. But I managed to scramble fast enough to stay a couple of weeks ahead of the students—most of the time!

"Once a week I brought a historical 'show-and-tell' item to my class, like a vacuum-tube module or a core plane. It produced puzzled but interested faces. I realized that the history of computers is no longer being learned, not even by the specialists-to-be. I had an epiphany: In a generation we could lose the knowledge of how the computer revolution came to be, unless we act to preserve it."

After Shustek finished his teaching duties, he traveled around the country in search of institutions that were preserving computer history. "It didn't take long to discover TCM and the 'buried treasure' in its archives," Shustek says. "After a discussion with Gwen and Gordon Bell, it took about a millisecond to accept their offer to help create the Computer History Center in order to expand and showcase the historical collection." Shustek's considerable talents were soon focused on getting The Computer Museum History Center started.

Fortunately for the Museum, the start-up phase was familiar to Shustek. Having earned undergraduate and Master's degrees in physics, and a second Master's along with a doctorate in physics, Shustek eventually moved from academia to test his skills in a "typical Silicon Valley garage start-up."

Shustek took a "temporary," eight-year leave of absence from teaching computer science at Carnegie-Mellon University in 1978 to found Nestar Systems, an early entrant in the network client/server computing business using personal computers as workstations. "It was a classic case in which a couple of academic escapees who know a little about engineering and nothing about business get to learn on the job by making mistakes," Shustek says in typically understated style. "Unfortunately, we made enough of them so that the company, although it grew to 125 employees, was never a success." Shustek adds with a smile, "We, of course, like to think it was because we were ahead of our time."



Photograph: © Louis Fabian Bachrach

Len Shustek has lent his talents to ramping up TCM's History Center.

Nestar was a fortuitous experience. Eight years later, Shustek tried again with some of the same colleagues. He co-founded Network General Corporation, which became an almost overnight success in network analysis tools for communications networks. Network General (NASDAQ: NETG) now has 700 employees and revenues of $180 million a year. Shustek now serves as Network General Fellow, which he describes as "a part-time position of great honor and no responsibility."

TCM: What's your wish for TCM?

Shustek: For it to become recognized worldwide as the leading institution devoted to explaining computer technology and preserving its history. Since we're well on the way to that goal, I feel very optimistic about the future of TCM.

TCM: What is one of the biggest challenges facing the industry?

Shustek: We started with the Hardware Era, progressed through the Software Era, and are now in the Information Era. The accumulated knowledge of civilization will from now on be stored using computer technology. That makes us responsible to provide universal access, freedom from censorship, efficient searches, clever organization, fair intellectual and commercial property rights, and unlimited archival storage, all in a way that makes economic sense. That's challenge enough for a lot of new start-ups!

Len Shustek: *Short Takes*

First computer:
An IBM 650, which was a vacuum-tube drum-memory computer. It was an early '60s effort by IBM to introduce New York high school kids to computers in the hopes of making them computer users instead of "juvenile delinquents." (I guess it worked; I never even *owned* a switchblade!)

Other philanthropic pursuits:
- Supporting the Packard Children's Hospital at Stanford in the Starbright project, which provides linked interactive virtual-reality playgrounds to seriously ill children who can't use real playgrounds.
- Establishing a group home in the south Bay Area for retarded young adults who have never before lived away from their parents.

Biggest technology gripe:
What annoys me most, especially now that the computer is a consumer product, is how difficult it is for most people to use. We can do better!

Phone or e-mail:
E-mail, almost always.

Recreation:
Hiking, bicycling, SCUBA diving, and riding a motorcycle in order to prove that I'm having my mid-life crisis on schedule.

Best advice ever received:
Always initialize all your variables. (Does anyone remember that the IBM 7040 used bad parity to detect uninitialized variables? Now there's a bit of computer history trivia!)

TCM: What was your most amazing "find" on the Internet?

Shustek: My sister, whom I had never met! I knew nothing about my older half-sister except that she might exist. We discovered each other through an Internet newsgroup last year, and we have since met—both in cyberspace and in person. Since we share some genes, it came as no surprise that she's in the computer business too. We've each had a lifetime that we're gradually filling each other in on.

History Center *(continued from p.1)*

self-selected audience of computer enthusiasts. Primary audiences include scholars, researchers, educators, engineers and journalists. In addition, History Center research projects will include the challenge of preserving software. Before the Center relocates, one of its first exhibitions will be in the William H. Gates Computer Science Building on the Stanford University Campus.

Positive Response in the Valley

The response to The Computer Museum History Center in Silicon Valley has been very positive. "Our industry has come of age," says venture capitalist John Doerr, of Kleiner Perkins Caufield and Byers. Although Doerr is legendary for his foresight about such start-ups as Sun Microsystems and Netscape, he sees a real need to invest in the past. "We're celebrating the 25th anniversary of the microprocessor. With every anniversary, there are more milestones ahead. More than ever, we need to preserve the history of computing for future generations. The Computer Museum History Center is taking this important step."

John Wharton, a technology analyst with Applications Research in Palo Alto, told *The San Jose Mercury News* about the History Center, "For the techno-nerds of Silicon Valley, this is exactly what we need." Wharton, the inventor of the Intel 8051 microcontroller, compares the Center's concept to beloved cars from another era. "For somebody working in the Valley in the '70s, this is like rolling out a '57 Chevy. I'm looking forward to there being a place where I can relive my technological youth."

Computer Museum Board Member Dave House, CEO of Bay Networks, is proud of the Museum's presence in Silicon Valley. "The Museum's historical collections are a world treasure, as are its exhibits," he says. "The strong support and concern about computing history from Silicon Valley industry leaders led us to the creation of the History Center in the Valley. It's a wonderful addition."

The Computer Museum History Center currently has a staff of three and is actively accessioning artifacts in Silicon Valley and elsewhere. To help organize the warehouse space, "workparties" are scheduled for Saturdays throughout the winter and spring. Already, many volunteers have generously put in significant sweat-equity. To join a "workparty" or see the warehouse space, please contact Zoe Allison at (408) 562-7919.

What's New at TCM in Boston

Along with the Museum's activity in Silicon Valley, things in Boston are flourishing. "The relocation of much of our collection storage to the West Coast gives our existing exhibits and educational activities new room to breathe," says Executive Director Oliver Strimpel. The activities in Boston are diverse and far-ranging.

Exhibits

• *The Best Software for Kids Gallery* (winner of *Boston* Magazine's Best of Boston™ 1996) is being continually refreshed—with 17 new software titles installed at year-end and more planned for the spring.

• Prototypes of *The Virtual FishTank* software, being designed by the MIT Media Lab, are now being tested at the Museum (see page 5).

• Plans are underway to add some of the vignettes from the "Museum at COMDEX" (see page 5) to the *People and Computers: Milestones of a Revolution* historical exhibit. The Hacker's Garage would be installed next to the Cray vignette, and the COMDEX versions of the milestone introducing the IBM PC and the Macintosh would replace the current displays. A review of 25 years of the microprocessor is planned for the 1990s' milestone area.

• Additional exhibits that build on the Museum's historical offerings for the general public include *Jewels of the Collection*, to highlight different artifacts from the Museum's collection every six months, and *Fifty Years of the Transistor*, to celebrate the invention and evolution of this technology, featuring transistors and modules from the earliest computers that used them, such as the TX-O, and other collections materials.

The Computer Museum Network

Recently selected as a Gold Site by *NetGuide*, the Museum's award-winning website (www.tcm.org) now receives 600,000 hits a month. A comprehensive new "Careers in Computing" resource (see page 6) has just been added. The next project is the *Robot Challenge*, an online interactive exhibit illustrating robotic remote control, scheduled for launch in late March. At the same time, the Java-enabled "Who's Out There?" area and *The Networked Puzzle* exhibit are being reconfigured for Marimba, an Internet, TV-style broadcast system, so that even more people will be able to experience these unique interactives.

Educational Outreach

• Three satellite versions of the Museum's Computer Clubhouse are now in full operation at inner-city community centers around Boston.

• The Museum was selected in December 1996 to be an official Eisenhower National Clearinghouse Access Site for educators nationwide online. As a partner with the Eisenhower Regional Alliance for Mathematics and Science Education Reform, the Museum will offer Internet workshops and other services to teachers in the Northeast region.

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COMDEX Museum Inspires Time-Travel

Last fall, things were a little bit different at COMDEX in Las Vegas. In a rare moment of tradeshow introspection, Softbank/COMDEX, Intel, Motorola and Ziff Davis Publishing partnered with The Computer Museum to create the "Museum at COMDEX," a time-travel through 25 years of industry achievement.

On November 15, 1971—when Vietnam and Mohammed Ali were making headline news—the introduction of the world's first microprocessor quietly ushered in a new era. The microprocessor has been at the heart of the information technology revolution ever since.

In recognition of microprocessing's historic birth, The Computer Museum curated and loaned artifacts to the "Museum at COMDEX." The exhibit took visitors back to 1969, when Busicom, a Japanese company, asked the Intel Corporation to design a set of custom logic chips for a line of programmable calculators. Intel designed a general-purpose chip that could be programmed to run all of Busicom's calculators, as well as traffic lights and many other devices. The 4004 chip sparked the insatiable growth that continues to the present.

Two steps beyond the 4004 vignette, a recreation of a "Hacker's Garage" transported visitors back to the 1970s. The "Garage" included a MITS Altair 8800; an Apple I board with homemade wooden box; and Nolan Bushnell's *Computer Space*, the first coin-operated video game. The transition from engineer to consumer had begun!

Other vignettes traced the chip up to the achievement of embedded control. Visitors to the "Museum at COMDEX" included microprocessing pioneers Ted Hoff and Frederico Faggin, Intel CEO Andrew Grove, Microsoft CEO Bill Gates, and media from around the world. Some of the vignettes were generously donated to the Museum for use in Boston.

Photograph: © The Production Network Inc., Seattle, Wash., use by permission

Andrew Grove, president and CEO, Intel Corporation, is in his element in the Hacker's Garage.

National Science Foundation Awards $600K for *The Virtual FishTank Exhibit*

The National Science Foundation's Informal Science Education group has awarded the Museum a $600,000 grant—the largest ever to the Museum—to develop *The Virtual FishTank*, scheduled to open in late 1997. The exhibit immerses visitors in a gigantic computer simulation of an aquarium, where they can create and interact with their own virtual fish, and gain new insights into how complex systems work.

In collaboration with the MIT Media Lab and the New England Aquarium, the Museum will build this virtual ecosystem using the latest techniques in 3-D computer graphics, Java programming, simulations, and artificial life. The *FishTank* will offer firsthand experiences in modeling real-world phenomena with sophisticated design and simulation tools and reveal how simple behavioral rules can produce surprising results.

Copyright 1995 The Computer Museum [drawing by Ann Powers]

This artistic rendering depicts visitors exploring *The Virtual FishTank* with Museum staff.

"Building a model to simulate the real world is a powerful way to understand it," says Mitchel Resnick, professor of research in education at the MIT Media Lab and *FishTank* project co-leader. "One of the best ways to learn is to make things. Here, you create rules for your own artificial creature and observe how it behaves. It's an engaging experience—and also highlights important scientific ideas."

The Experience

At 10 networked FishBuilder stations that are linked to the exhibit's central fishtank, visitors design their fish, choosing physical traits such as coloration and body shape. They also select behavioral parameters such as food preference, reaction to light and response to other fish. The effects of their choices are displayed immediately on a computer monitor. When satisfied with their design, visitors tag their fish, and "launch" them into the *FishTank*.

Three 10-feet-by-12-feet projection screens surround visitors in the simulated aquarium, which is filled with computer-generated fish, plants, snails and coral. Here, visitors experience how a few simple rules embedded in the design of individual fish generate complex behaviors and patterns for the entire ecosystem. For example, a school of fish may appear to have a leader, but actually local interactions among all the fish determine the orderly pattern. The exhibit will demonstrate that this phenomenon can apply not only to fish, but also to ants, birds, immune systems, highway traffic, market economies, fashion fads, and political moods.

Visitors can control the tank environment using various devices to program the presence of light and food. "Everything in the ecosystem relates to everything else," explains Resnick. "Visitors will see unexpected results. A visitor might program a fish to keep a certain distance from other fish, but it might end up dancing with other fish instead."

In developing the *FishTank*, the Museum has convened a distinguished panel of advisors. They include Richard Dawkins, Oxford University; Marquita Jackson-Minot, Harvard University; Melanie Mitchell, Sante Fe Institute; Craig Reynolds, Dreamworks; Charles Taylor, UCLA; Beth Warren, Technical Education Research Center; and Brian White, MIT.

Led by David Greschler, director of exhibits and project co-leader, the Museum is focusing on exhibit-related issues, while the Media Lab designs the software to run the *FishTank*, and the New England Aquarium assists with biology content development and formative evaluations. The *FishTank* will lend itself to structured educational activities that encourage visitors to predict the outcomes of a variety of manipulations of fish within the tank.

A second, traveling version of the *FishTank* is planned for spring 1998 to bring the exhibit to museums around the world. Sixteen museums and aquaria have expressed interest, including the Franklin Institute in Philadelphia and the Exploratorium in San Francisco. An online version, called FishNet, is also under consideration. The Museum is seeking further corporate and foundation support for this landmark exhibit.

Education

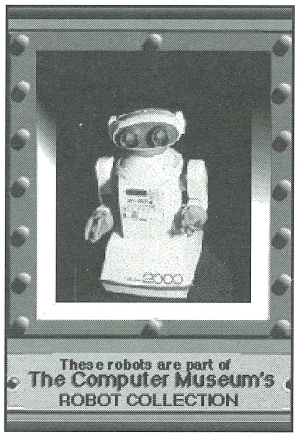
"Ultimate Inventions" Inspires Kids

The Museum is partnering with Continental Cablevision in "Ultimate Inventions," a nationwide educational program for fourth- and fifth-grade students to foster firsthand experience in the invention process.

A joint project of Continental Cablevision, The Discovery Channel and Learning Channel, Ultimate Inventions uses Discovery Channel television programming about inventors and inventions to inspire activities in the classroom. Teachers work with students to take an original idea for an invention from concept to completed project. The program culminates this spring in an "Invention Convention," that will display students' inventions at schools around the country.

The Museum is providing a customized version of its *Design Your Own Robot* web-based interactive exhibit, which enables visitors to create a robot based on six characteristics: energy, movement, intelligence, looks, sensing and manipulation. The customized version includes a module letting students submit their robot designs to an Ultimate Inventions website. The Museum also offers materials about robotics, including classroom activities and links to images and information about historic robots, on the Museum's Network.

Look for a link to Ultimate Inventions from the Museum's Network (www.tcm.org).



This screen shot shows one of the robots featured in the Museum's web-based *Design Your Own Robot* interactive.

Up and Running

Web Resource on Careers Offers Information, Links to Jobs

A new one-stop educational resource on The Computer Museum Network (www.tcm.org) offers in-depth information on careers in computing and links to actual job openings via The Monster Board career service. Just click on "Careers in Computing" in the Table of Contents.

The area is for serious job hunters and high school and college students at the exploratory stage. The Museum organizes masses of data from computer professionals, employment agencies, career-related websites, and the United States Department of Labor into one easy-to-explore package.

Profiles of careers are presented via a clickable map in five categories (hardware, software, support, education and research, and computer-assisted occupations such as architecture or medicine). Each category has a list of specific careers. Each expanded job description offers a salary range, likely employers, outlook for that position, skill preferences, and helpful educational or other requisite experience. Visitors can link to The Monster Board to browse 20,000 job postings, create searches based on job title and geographic location, and even apply for a job. Lists of appropriate career-specific websites, links to careers- and skills-assessment sites, an online job-hunting guide, and a Women in Computing page are also featured.

CAREERS

THE COMPUTER MUSEUM NETWORK

IN COMPUTING

Honors/Awards

Museum's Impact in Cyberspace Grows

MIMC Award. In October 1996, The Computer Museum Network (www.tcm.org) won the 1996 Massachusetts Interactive Media Council (MIMC) Award for "nonprofit/public service online site." The MIMC awards are New England's only competition recognizing outstanding achievement in interactive media. The Museum's site reinterprets the Museum's mission for the Web through Java-enabled interactive exhibits, a historic timeline, educational activities and resources, and a WebStore.

NetDay Honors. Also in October, the Museum was designated "NetDay Central" for Mass. NetDay 96, a grassroots effort, sponsored by MassNetworks Education Partnership Inc., to bring the Internet to some 400 Massachusetts schools.

Over 3,000 volunteers joined forces to install wiring, computers and software in the schools. Volunteers at the Museum fielded questions and tracked progress statewide as schools e-mailed and called in status reports. "I think the momentum established by this first NetDay will carry over," said Joyce Plotkin, executive director, Massachusetts Software Council, and president, MassNetworks Organizing Committee. Another NetDay is planned for April 5.

THE NONPROFIT ONLINE SITE
www.tcm.org

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Upcoming Events & Programs 1997

Friday, April 18

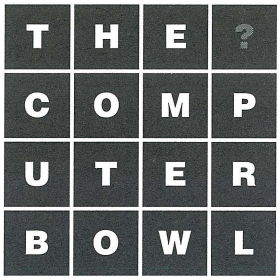
The 1997 Computer Bowl®

Watch the Bowl in person at the Santa Clara, Calif., Convention Center or by satellite from the Museum, as this year's teams match knowledge and wits while competing for the coveted trophy.

West Coast
Santa Clara Convention Center
5:30 p.m. Doors open (Pacific time)
6:00 p.m. The Computer Bowl begins

East Coast
The Computer Museum
6:30 p.m. Doors open (Eastern time)
9:00 p.m. Bowl simulcast begins

For more information, contact Carol Welsh by phone (408) 562-7915 or e-mail (welsh@tcm.org).



Daily
M-Free

Interactivities

Can a robot make a sandwich? It's harder than you think! Help our human Robot Chef make a peanut butter and jelly sandwich. It's one of eight Interactivities led by Visitor Assistants this spring. And on weekends from March 15 to April 27, join hands-on demonstrations of "New and Notable" multimedia software in the award-winning *Best Software for Kids Gallery*. Schedules change daily. Please visit the Museum or the Info Desk on the Web (www.tcm.org/info) for schedules.

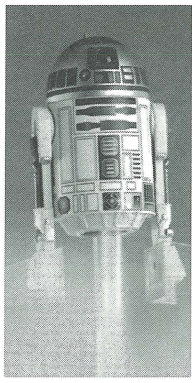
Photograph: FAYFOTO/John Rich

Museum Visitor Services staff, Ann Fraioli (left) and Rina Granizo, demonstrate that a Robot Chef's job is tougher than you think!

The Computer Museum Store

M-Discounts

As "R2-D2"™ lights up movie screens during the current re-release of *Star Wars*®, the original "R2-D2" welcomes guests at the Museum. In addition, The Computer Museum Store features "R2-D2" novelty items, robot-building kits, an original *Star Wars* movie poster, and Ivan Sutherland's classic, *A Walking Robot*, which is out of print and available only from the Museum.



R2-D2® Flying Model Rocket

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The Computer Museum WebStore
www.tcm.org/store/

Open 24 hours per day, every day.

New Computer Animation Festival (SIGGRAPH 1996): Weekends, Holidays, Vacations

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