

COMDEX
Special Edition



New Products Are Released

SAGETM Computer unveiled a new look at the recent COMDEX show in Las Vegas with changes in hardware and documentation. The key items were the announcement of a 40-megabyte hard disk drive, a tape backup unit, a completely rewritten set of documentation and a new terminal.

The most visible introduction was an ergonomic terminal that transforms the SAGE II/IV into a true contender among desktop business systems. A reviewer once said the SAGE II looked "like a stand-alone disk drive unit instead of a supermicro." The new terminal, with its matching coloration and straight-line pedestal design should eliminate the confusion. When stacked, the system now has an extremely small footprint, enhancing its "systems look". Cosmetics were not the only reason for the change; this terminal also operates at a much faster baud rate.

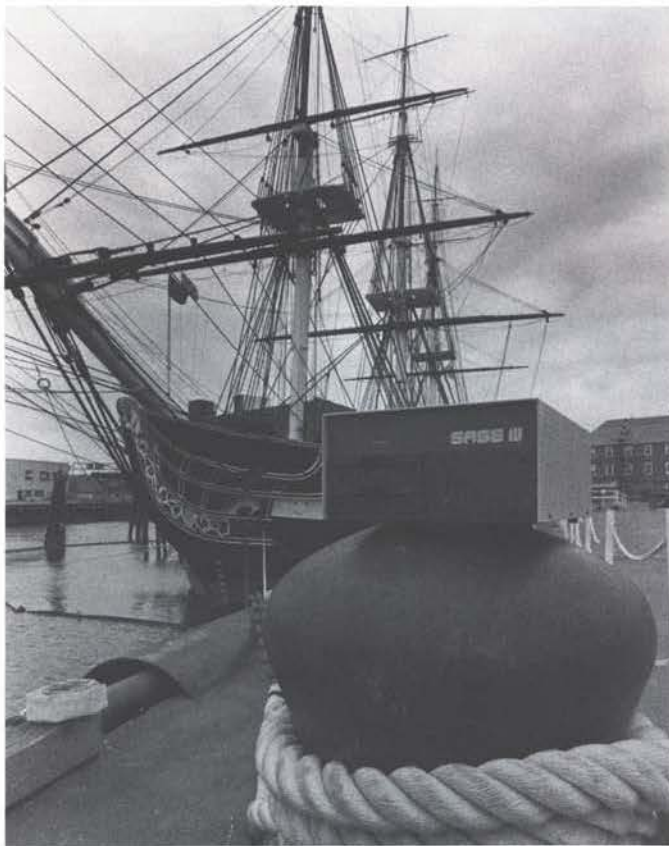
The new Winchester should also stir a lot of interest. Responding to pleas for more storage, the new 40Mb hard disk more than doubles the SAGE IV's previous limit of 18Mb. Marketing surveys have indicated that increased

storage was the Number One customer request for hardware improvement.

The other items are also on most SAGE-users' wish lists. The new set of five documentation manuals will be packaged in a smaller format, with an entirely new section, known as "In the Beginning", designed for the business and general-consumer community. Using more examples and a two-color layout, these new books should put the SAGE II/IV near the top of the "User-Friendly" class.

The tape backup unit shown at Las Vegas is a stand-alone model from Digi-Data Corporation. It uses an ANSI standard 1/2-inch cartridge connected to the SAGE IV's RS-232C serial port. Each cartridge holds 18Mb of data.

The full financial accounting system from State of the Art software was also demonstrated at COMDEX. The SAGE II, combined with this integrated package, made a powerful combination for businessmen looking at computerized accounting. SAGE offers the fastest implementation of this popular software, and was one of the only micros at COMDEX to offer businessmen an upgrade path to multi-user and hard disk storage as their needs increase.



Boston Loves Computers

Does Boston have more computer nuts than Silicon Valley? You might think so based on the turnout at the Computer Show and Software Exposition held in the historic city last month. The SAGE booth received quite a workout during the three-day event. The latest figures aren't in, but last year this show established a record attendance with nearly 56,000.

Boston's computer consciousness has certainly been raised by the proximity to MIT and Harvard, not to mention the concentration of system manufacturers scattered along Route 128.

That awareness is the reason that SAGE Computer opened its first regional office there several months ago. Located in nearby Burlington, the Eastern Division, headed by Jim Kinchley, serves Boston and the entire Northeast.

Based on the reception to that regional office, SAGE has now opened similar operations in Dallas and San Francisco to serve the South and West respectively.

The Eastern Division Office (Boston) is located at 15 New England Executive Park, Suite 120, Burlington, MA. If you're nearby, stop in and say hello.

UNIX Meeting

The UNIX world will be gathering in Washington, D.C. next month for *UNIFORM*, their annual conference and exposition. SAGE Computer will also be there demonstrating the UNIX-like Idris operating system.

The event starts January 17 and features exhibits, seminars and conferences related to the growing operating system from Bell Labs.

p-System Support

Looking for some FREE software? FREE seminars? FREE technical support? Well, it's all available if you're a member of USUS.

USUS is the p-System Users Society, and the items mentioned above are just some of the many reasons to send off the \$25 membership fee. Created in 1980, the users' group has now expanded to more than 2000 members worldwide. Through *Telemail*, their electronic mail service and bulletin board, they manage to keep members instantly updated of changes and ideas occurring in the p-System community.

The organization also serves as an effective lobby group expressing concerns to hardware manufacturers and the p-System owner, SoftTech Microsystems.



SAGE president Rod Coleman was on Vendor Panel at USUS meeting in Washington, D.C.

What about the FREE stuff? USUS maintains a large library of software that is available at no charge to members in good standing. There's everything available from *ADVENTURE* to time-saving programming utilities.

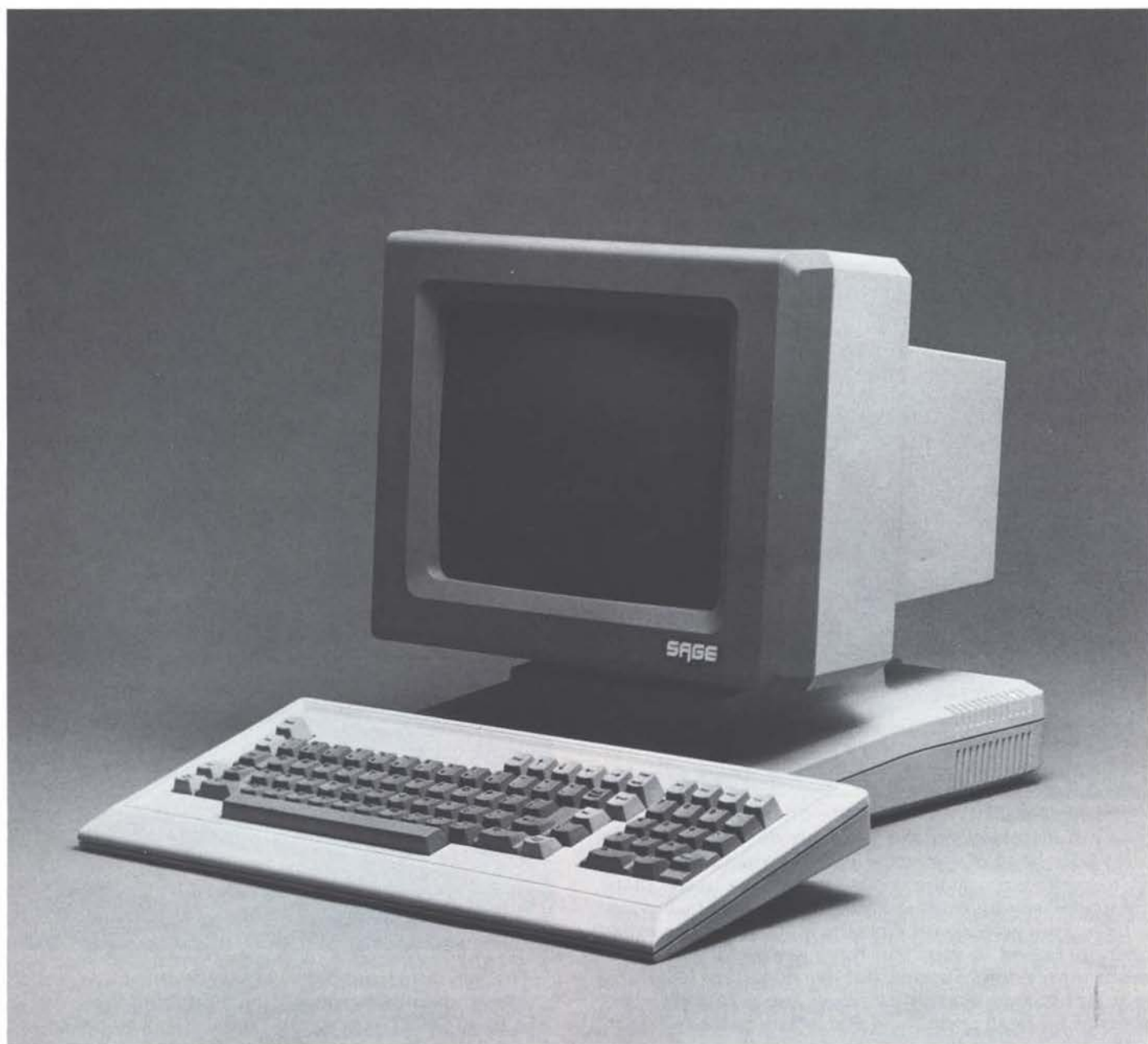
The seminars are also worth the price of admission. At the most recent General Membership meeting, held in Washington D.C. on October 14-16, there were sessions ranging from beginning PASCAL to advanced concepts in Modula-2. Sometimes sessions such as these are the only place to get answers to technical questions on the p-System.

The annual meetings are also an excellent information exchange. We discovered that developers are ready to lynch SoftTech over some problems with the p-System on the IBM PC, and that a majority of USUS members own SAGE's! The Washington gathering also produced a close election for president with George Symons of TICOM winning the title.

If you'd like to learn more about USUS contact:

USUS
c/o Tom Woteki, Secretary
P.O. Box 1148
La Jolla, CA 92038-1148
USA

Tom will also gladly accept your membership checks.



New Terminal Enhances System

"We need a terminal with speed, but one with a contemporary look that will complement the SAGE philosophy of performance by design." That's what SAGE Computer president Rod Coleman said he wanted, and apparently he's found it with the introduction of the new SAGE terminal.

"The SAGE II/IV supermicros are at the cutting edge of high technology, but our terminals looked dated," said Coleman. "This new design should give us a look to match our performance, and we'll be gaining a true 19200 baud rate that lets the computers really hum."

The new unit features a platform pedestal and a 12-inch diagonal screen with full tilt and swivel to accommodate difficult locations. The keyboard is detachable and has

retractable feet for two-position adjustment.

The keyboard layout is conventional with Programmable Function Keys located above the numeric keypad. One nice touch is the deeply-sculptured caps on the "F" and "J" home keys.

Terminal setup is controlled strictly through the keyboard so there are no DIP switches to set. Individual setups may be saved in memory, and it is easy to switch back and forth between factory defaults and custom configurations.

A medium-resolution business graphics version of the terminal is also available as an option. All models are molded in gray and ivory plastics to match the SAGE II/IV coloration.



Storage Doubled

The new SAGE IV 40-megabyte drive will offer more than just increased storage. Not only does the new unit offer a doubling of storage, it features faster access times than smaller units. At the same time it maintains complete compatibility with existing SAGE hardware and software.

It does this in two ways. First, the number of platters has been increased to four and there are eight read/write heads for maximum access. But in a departure from current technology, these new drives use a rotary torque actuator for head positioning that is both faster and more accurate, allowing higher track density. Average access time on the new drive is 45 msec compared to 49 or 50 msec for standard stepper motor designs.

Yet with the increased storage and performance, the 40 still fits into the same physical slot as our 12 and 18Mb units and uses the same power supply.

There are several other features of the new drive which should appeal to SAGE users. Head parking on the 40 is automatic. The SAGE4UTIL parking routine will not be required. These new units will perform the task automatically when powered down.

If you like specs, here are a few of the numbers:

- Net formatted capacity on SAGE — 39.846Mb
- Disks — 4
- Heads — 8
- Transfer rate — 5.0 megabits/second
- Rotational speed — 3529 rpm
- Access time (track-to-track) — 10 msec
 - 45 msec
 - 80 msec

The 12, 18, and 40Mb SAGE IVs are all being shipped now and are available from SAGE Computer dealers.

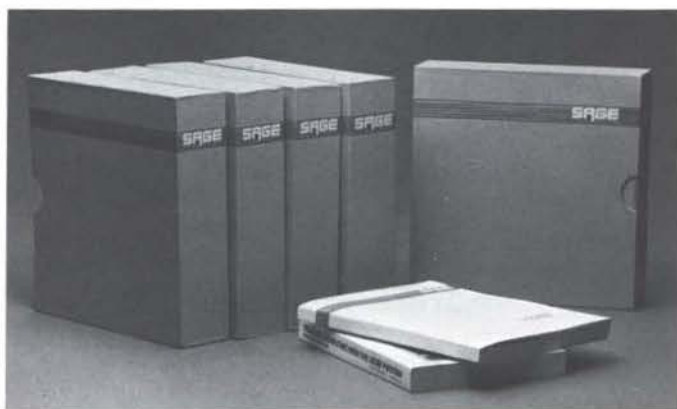
New Documentation

The first set of SAGE Computer documentation aimed specifically at the first-time or non-technical user will debut at the COMDEX show this month.

When it was decided to market the SAGE II/IV in the general business community, it was clear that the original set of four manuals was inappropriate. While they had earned praise for their technical detail and completeness, they often left business customers confused.

Starting with a clean sheet, the philosophy of the documentation team was to require the least amount of work by the least knowledgeable user. However this approach also meant some changes in software.

There will now be four systems diskettes distributed: *SYSTEM*, *UTILITY*, *BUSINESS* and *BUILD*. The last two are filled with menu-controlled programs aimed at easing installation procedures. *BUSINESS* contains the bundled software for word processing and spreadsheet, along with a new communications package and a demonstration program. The *BUILD* diskette contains several different routines to set up the Multi-User system. This should meet the needs of most Multi-User customers, while saving them hours of configuration work.



The new documentation was tested with "focus group" studies using non-computer personnel. All those tested had their SAGE Systems out of the shipping boxes and running programs successfully within 90 minutes. The Multi-User setup took an additional hour. Best of all, all reported "feeling good" about the computer upon completing the initial hardware set-up.

The documentation team of Verlene Bonham and Maria Davis spent the last four months on the project and are pleased with the results. "The new manuals should compete with any others in terms of user friendliness, but they still retain a wealth of technical information for SAGE's large development and technical crowd," Bonham said. The five slipcased binders are titled: *GETTING STARTED*, *TECHNICAL MANUAL*, *SDT/ASSEMBLER*, *OPERATING SYSTEM*, and *PROGRAM DEVELOPMENT*.

The last two manuals were recently written by SoftTech Microsystems and formatted to SAGE Computer's style. Both incorporate the latest revisions to the p-System.

By mid-December, the new manuals will be shipped with all SAGE systems, together with a new book, *Personal Computing with the UCSD P-System* and a copy of the most recent *SAGE Software Catalog*. All of the above publications will be available separately from SAGE dealers.



photo by Stu Murland

Ever seen LISP on a micro? How about a complete CAD (Computer Aided Design) unit? Those are just two of the unusual applications that will be demonstrated at SAGE Faire '84 in February.

Metacomco from England has managed to port a mainframe LISP to the SAGE system and will be showing it for the first time in the U.S. at the *Faire*. Cademic will also have a booth at the show to demonstrate their design system that is sure to appeal to electronic draftsmen looking for an affordable CAD unit.

Over two dozen major vendors will be showing their latest products for the SAGE, as will numerous smaller developers. In addition, over 20 speakers have already been signed for topics ranging from International Marketing to Advanced Computer Languages.

The gathering will be a chance for customers, dealers, developers and engineers to come together and share the excitement of what's been happening at SAGE Computer. And what better place for the event. The MGM in Reno is the largest hotel/casino in the world and features spectacular entertainment.

To sweeten the package, discount airfares and low room rates are available. Why, there's even a doorprize of a \$6000 SAGE II system complete with software just for signing up.

Convinced? For reservations and more information, please write SAGE Computer, 4905 Energy Way, Reno, NV 89502, or call (702) 322-6868.

The three-day SAGE Faire '84 begins February 3, 1984.

IC DESIGN
945-3844

More Computer Shows on TV

The Public Broadcasting System (PBS) added another computer-interest show to their fall TV schedule.

The New Tech Times, hosted by Nicholas Johnson, the former head of the FCC, explores home computers, home robots, video games, and other new technologies.

It includes reviews of new electronic products, expert

commentaries, interviews, in-depth features, and news. Segments spotlight such occurrences as living in an "electronic cottage," creating art electronically, and using electronic bulletin boards for special interest groups.

The show joins three other PBS offerings: *Bits, Bytes and Buzzwords*, *Making It Count* and *Computer Programme*.

SofTech Announces Network Software



SoftTech Microsystems announced their new network software at a press conference in New York on October 31. The name is officially *Liaison*™ and it's described as a network-enhanced version of the p-System.

If it performs as promised, it could vault the p-System into prominence. The key is using the current object code portability in a local area network (LAN), therefore linking different equipment together. It will be the first such design allowing communication between SAGE, Apple, DEC, Epson, H-P, Wang, Radio Shack, TI, Zenith, NCR, NEC and Olivetti.

There are several other unique features including full disk and printer sharing between all users. One package

developers should like is the *Monitor* within the *Liaison Tool Kit*. With this program, third party software writers will be able to limit the number of users who can access a given copy of an application. That should give a control method to enhance sales income dramatically.

The initial release of *Liaison* is compatible with Corvus Systems' *Omninet*™.

Currently, the network is not supported on SAGE hardware, but President Rod Coleman said that when the product is actually released in February of 1984, it will be evaluated for future hardware design consideration.

For more information, contact SoftTech Microsystems, 16885 West Bernardo Drive, San Diego, CA 92127.

Bits & Bytes

Essential Pascal Aids (E.P.A.), the handy utilities package we reviewed last month in SAGE News, is now being sold directly through SAGE Computer.

This is a great tool for programmers and hackers. Almost everyone here at the factory uses some part of the program on a daily basis and it's made a lot of friends. The package was developed by Micro Strategies and should be available at SAGE dealers immediately.

* * *

The world's first electronic wine catalog, WINEBUYS, is now being distributed by The Source. The catalog, listing fine California wines from Sonoma County, gives wine-lovers access to selections from over 50 wineries. Many of these wines are unavailable through traditional outlets outside Northern California.

If you live in California or any of 13 other states, you can order with your computer and The Source. Shipping costs range from \$10 to \$20 a case.

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SAGE microcomputers are now in South Africa. They were recently installed by MBM Computers of Johannesburg in the Computer Science Departments of Rhodes University, Grahamstown and the University of Natal, Pietermaritzburg.

Dr. Julian Menashe, head of MBM Computers, described the SAGE supermicro "a versatile unit, ideally suited for academic use." It "can be employed just as successfully in undergraduate science departments as it can in the post-graduate departments."

* * *

If your computer is "giving you static", you might be interested in an eight-page color brochure containing techniques for static-proofing a computer work area. Write ACL Incorporated, 1960 East Devon Avenue, Elk Grove Village, IL 60007 for a copy.

Input

Dear SAGE News:

Thanks for the fast help last week with the defective distribution disk. I like the machine very much and am impressed by the documentation, software, and service help when needed, so I bought it. Thanks again for the quick help!

Dr. Bill Salmon
University of Utah
Dept. of Computer Science
3160 Merrill
Salt Lake City, UT 84112

Dear SAGE:

Sierra Micro called me to inform me that SAGE II 068089 is technically out of warranty because they held it for some time before I purchased it. Unfortunately, I had already shipped the computer.

Sierra Micro has assured me that the SAGE warranty begins at the time of purchase. They asked me to send you a copy of my purchase invoice. I hope that this will prevent any problems with the warranty repair of my SAGE II microcomputer.

Gerald Perkins
643 Channing Avenue
Palo Alto, CA 94301

(Your information is correct, Gerald. Your warranty begins on your date of purchase, regardless of when your dealer sent in his portion of the warranty card. Your purchase receipt will always serve as a record in case the warranty card is misplaced. ED.)

Dear SAGE News:

I am relatively new to computers, and purchased my SAGE II on the advice of friends who knew the industry. I'm now very happy with the system, but it sure took a long time. My problem was the DIP switch settings, and your manuals didn't really explain how to set the switches. These books are probably great for people with years of experience, but I found them to be confusing.

Jason Thompson
933 Gear Street
Reno, NV 89503

(We agree. The SAGE documentation has been completely re-written. See story in this issue. Ed.)

Idris from SAGE

Idris, the Unix-look-alike developed by Whitesmith's and ported to the SAGE IV by Logos Systems, can now be ordered directly from SAGE Computer.

Logos Systems will demonstrate *Idris* at COMDEX in Las Vegas and at the SAGE Faire in Reno in February.

New Dealers

The number of authorized dealers throughout the country continues to grow. Welcome to SAGE:

ASI/ABBOTT
SYSTEMS, INC.
William Heffernan
375 Fairfield Ave.
Stamford, CT 06902
203-348-4722

MIS COMUTER SYSTEMS
Thomas J. Campbell
1415 Rollins Rd. #5
Burlingame, CA 94010
415-342-7009

CHARLES BUTLER
Charles Butler
1708 Fair St.
Mankato, MN 56001
507-388-7019

BIOTRONICS
Justine Wetherington
7826 S.W. 13th Road
Gainesville, FL 32608

ELIACOMPUTER
Eliakim Willner
1510 East 4th St.
Brooklyn, NY 11230
212-336-4109

AJM DATA SYSTEMS
Michael D. LeBeck
3111 E. Main
Ventura, CA 93003

Questions and Answers

Can I use the WORD/7 package to edit my existing ".text" files?

Yes. WORD/7 uses a unique suffix to identify its correspondence from other text files. On the current release of WORD/7, that suffix is ".d". To use an existing ".text" file, use the Change feature of the Filer to change the name of your text by replacing ".text" with ".d". The newest version of WORD/7 to be released soon, has a utility to change this suffix from a menu. Using that, you simply make the WORD/7 suffix a ".text".

How should you remove diskettes when they don't pop out of the Drives?

The best way is to depress the top latch and then let it up. Usually the diskette will then jump out. It's like stopping a toilet from running by jiggling the handle. Try it. It works.

Why does my SAGE IV display Drive Error 08 on startup?

There are several reasons, but the most common is that your SAGE IV just needs to warm up a bit. If the room temperature drops overnight, the disk gets cranky. A 15-minute warmup, followed by a RESET, should solve the problem. Better yet, don't turn off your computer. It won't get cold, and the power consumption involved is minimal.

Seasons Greetings from SAGE Computer

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Sage Fellow — Wilbur Harvey

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Draftperson — Leah Wright

Help Wanted

COMPUTER PROFESSIONALS

Continue ON A FASTER TRACK with us. Match your high qualifications and motivation to exceptional opportunities available now at SAGE Computer. Our competitive compensation includes an excellent salary and fringe benefits package.

Please send your resume, in confidence, to Serena Sigl, Director of Personnel, SAGE Computer, 4905 Energy Way, Reno, NV 89502.

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COMPUTER

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