

**>>> ON OCTOBER 14, 1947 A TEST PILOT NAMED CHUCK YEAGER CLIMBED INTO AN ORANGE, BULLET SHAPED X-1 ROCKET AND WAS DROPPED AT 20,000 FEET FROM THE BELLY OF A B-29 SUPERFORTRESS AIRPLANE.**

Soon observers on the ground were jarred to attention by a thunderous boom. Fearing that Yeager's experimental plane had exploded, ground technicians searched the sky for falling debris. What they didn't realize was that Yeager had become the first person to fly faster than the speed of sound, or Mach 1, which produces a 200 decibel shockwave.

Today we are all experiencing sonic booms of a different sort as computer science is producing explosive advancement in nearly every profession and field. Whatever your educational goals, you will need a solid foundation in computer science and technology to advance in your field. "I often talked with students about career options," says Letitia Andrews, an information technology (IT) professor at El Centro College in Dallas, Texas. "Each conversation ends with the thoughts of how technology is an important aspect of their pursuing and being successful in their career choice."

**AUTO MECHANICS** is also a valued certificate, with average salaries ranging from \$18,000 per year for repair technicians to as much as \$65,000 annually for master mechanics. Mechanics today, however, must feel as comfortable with a computer as they do with a high performance engine. Cars and trucks now operate with electronic and computer systems that are in turn tested and, in many cases, repaired by mechanics using computers and computer based machines.

If you are interested in computers, **COMPUTER SUPPORT SPECIALISTS** can expect higher than average job growth in their field with salaries that range from \$40,000 to nearly \$70,000 per year. As you can guess, support specialists troubleshoot and analyze technical problems computer users are having with their software, hardware, or systems. Often computer support specialists are independent contractors who serve their clients by phone or online.

But, if you'd prefer that your "clients" have more fur or feathers than the average human, then you might be headed for a career as a zookeeper. **ZOOKEEPERS** often earn, or at least

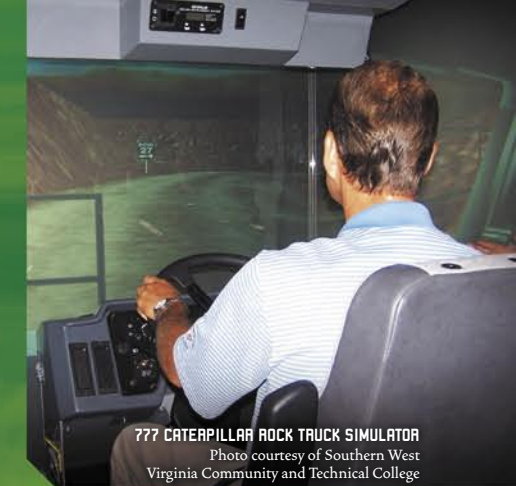
## HIGH TECH MINING >>> THE FUTURE IS HERE!

For most of us, coal mining is not an industry that comes to mind when thinking of technological breakthroughs in the workplace. Most of us, that is, except for the innovative staff at Southern West Virginia Community and Technical College. They have established an ongoing relationship with the mining industry to train the next generation of mine workers.

"With more than 700 graduates from Southern's Academy for Mine Training and Energy Technology, the Academy continues to grow," announces director Carl Baisden. "And a new mine training simulator facility, including a mine ergonomics lab, will soon be available for students."

Baisden emphasizes the mining academy is using equipment simulators and providing hands-on training to students in an effort to prepare a safer, more knowledgeable work force. "There are many good paying jobs for today's mine worker with average annual salaries of \$50,000 a year plus benefits," says Baisden.

Mining is a specialized career in West Virginia—check with your local two-year college about careers in high demand in your community.



777 CATERPILLAR ROCK TRUCK SIMULATOR  
Photo courtesy of Southern West Virginia Community and Technical College

into the who, what, where, and why of a national political campaign or the outcome of a major sporting event. In that case, your personality is probably more suited to a career like **JOURNALISM**. While salaries and working conditions range widely and are dependent on the size of the market where they work, all journalists must be comfortable with technology and computer applications as they are with the rules of grammar. With rapid advancement in the Internet and software programs, reporters are able to quickly research, map, analyze, and deliver a story in a fraction of the time and with more detail than they could even a few years ago.

phenomena). In fact, clinical psychologists with training in computer science are able to pick and choose the best jobs and earn higher salaries that can range up to \$92,000 per year.

So, whether your interests lie in the mechanical sciences or the science of creative thought, the explosion of technology will dramatically impact the career you choose. **Get prepared now and learn as much as you can about the latest computer applications and technological advances in your field of interest. M**

Contact your local two-year college about programs offered in Computer Technology.

## MOVE YOUR CAREER

From **AUTO MECHANICS** to **NUCLEAR ENGINEERS, TECHNOLOGY** and

## AHEAD AT MACH SPEED

**COMPUTER SCIENCE** are impacting and transforming the way everyone works.

**TO GET AN IDEA OF HOW TRUE THIS IS, LET'S LOOK AT DIFFERENT TYPES OF JOBS** some you would expect to regularly use computers as well as career paths where the technical expectations might surprise you. For instance, a certificate in computer database administration might lead to a career as a **WEBMASTER**. Webmasters are responsible for the development and technical maintenance of a website. Their skills must include coding words and art so they can be viewed on a site, updating and testing data that has been posted, and ensuring performance issues like downloading and access speeds are optimized. At this time webmaster skills are highly prized and their salary range in 2004 was between \$46,000 and \$78,000.



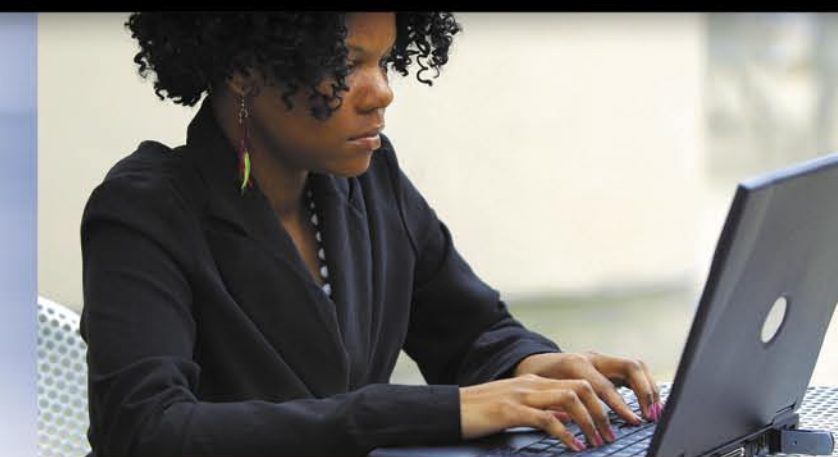
begin, their degrees at a two-year college by taking courses in biology and animal science. They also must be comfortable using a computer database to monitor, record, and evaluate eating patterns, injuries, illnesses, or changes in each animal's behavior.

At the four-year college level, one of the fastest growing occupations is **COMPUTER SOFTWARE ENGINEERING** - a career that centers on designing, building, and maintaining applications and systems software. With median salaries averaging between \$60,000 and \$100,000 per year and ever-increasing investment from corporations and the U.S. government into the development of new technology like hand-held computers, wireless networks, and cyber security computers, software engineers can expect very bright and lucrative futures.

Of course tirelessly working through complex coding for a new software application may not be as appealing to you as digging

For those adept at computer science and who want the financial rewards and satisfaction of earning an advanced degree, technically minded students might consider the exciting field of **NUCLEAR ENGINEERING**. These highly respected professionals design and develop the equipment, processes, and systems used to operate and maintain nuclear facilities. Despite median salaries approaching \$120,000 annually, at present very few students are pursuing nuclear engineering degrees. This means job opportunities for this field are projected to be quite good in the coming years.

While unlocking the mysteries of the atom may not get your pulse racing, perhaps delving into the even deeper enigma of the human mind will rouse your interest. Their work varies, but in general **CLINICAL PSYCHOLOGISTS** help mentally, emotionally, or physically disabled patients learn to cope and live with a life-long condition or the recent effects of an injury or illness. And, while training, experience, and keen observation skills play important roles in successfully treating patients, a clinical psychologist must regularly utilize computer-based analysis to accomplish complex quantitative research (or the use of mathematical models to study natural or social



## TECH SECURITY >>> TO THE RESCUE!

The Information Systems Security Program at Harford Community College in Bel Air, MD is designed to prepare students for the hot new field of information technology security. Students gain hands-on experience with the latest hardware and software to implement appropriate security policies and procedures. "At the Cyber Security Focus Group meeting, hosted by HCC, network and information security skills and knowledge were identified as critical abilities and expertise employers wanted for their employees," states John Mayhorne, dean of Harford's Business, Computing, and Applied Technology department.