HIGH-TECH GIANTS

ALUMNI PERSPECTIVES ON WORKING FOR TECHNOLOGY PIONEERS:
DIGITAL EQUIPMENT CORPORATION, PRIME COMPUTER, AND WANG LABORATORIES

> BOB BOZEMAN [UC ’78]
TUSCANY Alumni Travel Program:
OCTOBER 22-30, 2008

Trip Highlights
• Spend seven nights in the ancient Etruscan city of Cortona, wonderfully situated in the heart of Tuscany and the inspiration for the book Under the Tuscan Sun by Frances Mayes.
• Explore the tranquility of Assis and the graceful Gothic ambience in Siena.
• Marvel at the architectural wonders of Renaissance Florence.
• Experience the prodigious medieval history in Perugia, the well-preserved jewel of Umbria.
• Learn the essence of Tuscan cooking—the incomparable blend of olive oil, sun-ripened tomatoes, and herbs—at a demonstration by the chef of the award-winning Restaurant Tonino.

Space is limited so reserve your spot today! For More Information: contact Paula Vogel at p.vogel@neu.edu or 617.373.2727.
Registration: register online at http://nortea.ahitravel.com/ or call the Northeastern University Travel Program at 1.800.323.7373.

The alumni travel program is sponsored by the School of Professional and Continuing Studies.

UPCOMING ALUMNI EVENTS

The School of Professional and Continuing Studies is committed to making connections with alumni and also connecting alumni to students. With that in mind, we have created social, networking, and educational events for alumni.

For more information on these events and for a complete listing of all upcoming events, please visit:
www.spcs.neu.edu/alumni/events

EMERGENCY MEDICAL PROFESSIONALS CONFERENCE
JUNE 14
BURLINGTON CAMPUS
Conference for EMT and Paramedics.

LUNCH WITH DEAN HOPEY
JUNE 18
CAPE COD, MA
Enjoy lunch with fellow alumni and Dean Hopey on the Cape.

PREPARING FOR COLLEGE
JUNE 21
NORTHEASTERN VISITOR CENTER
BOSTON CAMPUS
This half-day workshop helps families financially prepare for college.

PROFESSIONAL NETWORKING EVENT
SEPTEMBER 2008
BOSTON, MA
Join fellow alumni for a professional networking reception in downtown Boston.
CONTENTS [SPRING 08]

2 The Ongoing Relationship Between Industry and Higher Education
Dean Christopher E. Hopey

4 The Enduring Influence of the Original High-Tech Giants
Route 128 and the companies that launched a quarter-million careers

Alumni Profiles:
7 Bob Bozeman
8 Fred Egan
9 David Hoiriis
10 Carol Reid
11 John Sutherland
12 Tom Racca

Faculty Profiles:
16 Scott Carlson
17 Paul Tsang

18 Delivering on a Promise

20 Recent Events

22 Of Note

24 Red Sox Fans in Exile
THE ONGOING RELATIONSHIP BETWEEN INDUSTRY AND HIGHER EDUCATION

In this issue of *Encore*, we take a look back at an extraordinary time in the history of the high technology industry, as well as the history of the Massachusetts economy. Not only do we learn that Northeastern’s University College alumni contributed in a variety of ways, but also that industries and universities worked together to support and advance one another. In particular, we discover how the School of Professional and Continuing Studies (SPCS) is uniquely structured for this purpose.

We are committed to developing degree, certificate, and professional development programs that keep pace with today’s leading industries. At the same time, our faculty includes distinguished researchers and industry leaders who have exceptional academic credentials and impressive public- and private-sector résumés. We frequently provide connections to colleagues, businesses, resources, and mentors that can define a student’s career path. Faculty researchers and their student collaborators have access to state-of-the-art research facilities, both on campus and in Greater Boston. As industry leaders, our adjunct faculty have the expertise and experience of applying knowledge to the issues of their profession.

The high-tech boom of the 1970s and 1980s created tens of thousands of jobs for people with the right skills, drive, and desire to be a part of that new frontier—the computer industry. This collaboration between industry and the world-class educational institutions in and around Boston made it possible to develop the skilled and knowledgeable workforce that supported the phenomenal growth of that time.

We can draw some parallels between our collaboration with the high-tech industry in the 1970s and 1980s and the way we develop programs to address the needs of today’s economy. Our three-pronged approach to building programs and curricula aligns with the current and future needs of leading and emerging industries. First, one of the hallmarks of our school is that we draw adjunct faculty from the local business community. That gives us an immediate connection to leading industries, including high technology, financial services, and healthcare.
“WE LEARN MUCH ABOUT WHAT IS HAPPENING IN SPECIFIC INDUSTRIES THROUGH OUR STUDENTS, MANY OF WHOM ARE HIGH-LEVEL EXECUTIVES WORKING IN THE FIELDS WE SERVE.”

We use that talent to create new talent, which is a powerful model for educating students. The faculty offers us insights into cutting-edge technology and emerging industries, as well as valuable professional networking opportunities for students.

The second way that SPCS partners with industry is through our ongoing involvement with advisory boards, which inform the School on the latest trends and keep SPCS apprised of the needs in the marketplace. While building the curriculum, we continually consult with industry leaders.

Market research is the third element of the School’s approach to developing programs and training students for industry’s needs.

Through a partnership with Eduventures, we study industry trends, whether it be in technology, financial services, or healthcare. This research helps us to plan where we are headed and ensures that we are aligned with industry needs. In addition to these efforts, we learn much about what is happening in specific industries through our students, many of whom are high-level executives working in the fields we serve.”

What’s more, with all the new delivery systems we now have, such as online and hybrid course formats, we can draw on experts who are outside of the local area. This keeps us attuned to the needs of the broader marketplace.

As you read about the experiences of our alumni who served on the front lines of the high-tech revolution during the 1970s and 1980s, you will understand how vital the relationship between industry and education was to the Massachusetts economy—and to leading-edge companies of that time, such as Digital Equipment Corporation, Prime Computer Systems, and Wang Laboratories.

Christopher E. Hopey, Ph.D.
Vice President and Dean, School of Professional and Continuing Studies
THE ENDURING INFLUENCE OF THE ORIGINAL

HIGH-TECH

ROUTE 128 AND THE COMPANIES THAT LAUNCHED A QUARTER-MILLION CAREERS

There have been several periods during the relatively young technology era that have generated excitement, fostered ingenuity, and produced financial gains akin to the California Gold Rush of the mid 1800s. The most recent was the dot-com explosion at the turn of this century. But before Silicon Valley became high-tech’s mecca, there was the technology boom of the 1970s and 1980s. During that time, Massachusetts was the epicenter of high technology—Route 128 was the road to the future, and it was paved by companies whose influence continues today.

What’s in a Highway Name?
A thoroughfare with an abundance of nicknames, Route 128 (a.k.a. the Circumferential Highway, a.k.a. Yankee Division Highway, a.k.a. the Magic Semicircle, a.k.a. America’s Technology Highway) is a central character in Massachusetts’ high-tech and economic history. While the roadway originally known as the “Circumferential Highway” was formed in 1927, the first stretch of the current limited-access highway did not open until 1951. In 1955, a BusinessWeek article titled, “New England Highway Upsets Old Way of Life,” referred to 128 as the “Magic Semicircle.”

By 1956, Route 128 was 65 miles long, extending from Gloucester to Braintree. It was widened to eight lanes by 1958 to accommodate unyielding economic growth. Businesses began to locate along the route at a rapid pace—in 1957 the highway was home to 99 companies, a number which grew to nearly 600 by 1965, then more than doubled to over 1,200 by 1973.

The roadway was meant to relieve traffic in and around Boston and its growing suburbs, which it did. But it also drove economic growth, spawning the first modern industrial parks—ideal locations for the area’s emerging technology companies. In fact, so many technology companies set up shop in the region, that Route 128 became known as “America’s Technology Highway.”
In the 1980s, the positive effects of Route 128 on the local economy were hailed the “Massachusetts Miracle.” This period of economic growth was heavily centered in high tech. Major companies located in and around Route 128 included Analog Devices, Computervision, Data General, Digital Equipment Corporation, Polaroid, Prime Computer Systems, Sun Microsystems, Raytheon, and Wang Laboratories, to name just a few.

In their book titled, *Route 128: Lessons from Boston’s High-Tech Community* (Basic Books, 1992), former *BusinessWeek* reporters Susan Rosegrant and David R. Lampe attribute the high-tech boom to a spirit of idealism and entrepreneurship, combined with a fortunate mix of local resources. The region’s world-class universities, hospitals, and laboratories attract skilled and creative students, professors, and scientists, who continue to supply and advance the local high-tech industry.

Recently, *Encore* had the opportunity to talk with several University College alumni who were part of the Massachusetts Miracle. Each of these individuals brought a unique background and skill set to their respective companies, performing different roles within Wang, Digital, and Prime. What’s interesting are the consistent themes that weave throughout their experiences. These highly successful companies grew into huge corporations and embraced their entrepreneurial spirit. By creating environments where individuals were given the opportunity to apply themselves, they made an important contribution to the success of not only the company, but also the economy of the geographic region and the industry as a whole.

DEC was founded in 1957. At the time, there were 99 companies employing 17,000 workers along Route 128.
Digital Equipment Corporation (DEC) developed computer hardware that was among the most popular in the 1970s and 1980s. The company was responsible for important technological breakthroughs. From 1957 until 1992, its headquarters were in an old woolen mill in Maynard, Massachusetts. Digital was acquired by Compaq in June 1998, which subsequently merged with Hewlett-Packard in May 2002. The company was founded by Ken Olsen and Harlan Anderson, two engineers who had been working at MIT’s Lincoln Laboratories.

At its peak in the 1980s, Wang had revenues of $3 billion per year and employed over 40,000 people.

>> Wang Laboratories

Founded in 1951 by Dr. An Wang and Dr. G.Y. Chu, Wang Laboratories was a computer hardware developer that evolved its business from calculators to word processors to minicomputers and microcomputers. The driving force behind the success of Wang was Dr. An Wang who founded Wang Laboratories in June 1951. In 1955, when it received a patent for its breakthrough technology making magnetic core memory possible, Wang incorporated with Dr. Ge-Yao Chu. Despite successfully evolving through several major company transitions, Wang Laboratories filed for bankruptcy protection in 1992.

>> Digital Equipment Corporation

Founded in 1957, Digital Equipment Corporation (DEC) developed computer hardware that was among the most popular in the 1970s and 1980s. The company was responsible for important technological breakthroughs. From 1957 until 1992, its headquarters were in an old woolen mill in Maynard, Massachusetts. Digital was acquired by Compaq in June 1998, which subsequently merged with Hewlett-Packard in May 2002. The company was founded by Ken Olsen and Harlan Anderson, two engineers who had been working at MIT’s Lincoln Laboratories.

>> Prime Computer Systems

Prime Computer was a Natick, Massachusetts-based producer of minicomputers from 1972 until 1992. The computer design and manufacturing divisions of the company were eliminated, and the company was renamed Computervision. In 1998, Computervision was bought by Parametric Technology Corporation, which still exists today.

At its peak in 1987, DEC employed more than 140,000 people.
Bob Bozeman (UC 1978) has achieved an exceptional degree of success in the high-tech business during the course of his 30-plus-year career. Today, he is an advisor to companies seeking acquisition opportunities in the technology industry. Previously, he served a variety of software, information services, and computer supplier companies in a range of executive management roles. He was the general partner of the highly successful venture firm, Angel Investors LP, whose investments included Google, PayPal, Ask Jeeves, AvantGo!, BrightMail, and RedEnvelope.

The first step on Bob's remarkable career path was in management information systems (MIS) at Wang Laboratories. He joined the company in 1974 in a technical management role, heading up its internal information technology (IT) systems.

It was during his first years at Wang that Bozeman attended Northeastern's University College, earning a combined degree in management and arts and sciences in 1978.

"Northeastern fit my lifestyle," he explains. "They had quality instructors and a pragmatic approach that allowed me to do what I wanted to do."

Eventually, Dr. Wang asked Bozeman to join his product development center. His new role had him splitting his time between MIS and product development. Later, he would be named vice president of systems programming, contributing to growth in revenue from $50 million to $2.7 billion.

During this time, Bozeman saw the company transform its identity several times, transitioning from a calculator company to a small-business computer company to a simple word processor/office automation business to a computer supply business.

“When I left Wang in 1981," Bozeman recalls, “it was natural time for me to leave. I had done all I could do there at the time, and I needed a new challenge.”

He took a position as vice president of marketing at Altos, a company that resold microcomputers. Bozeman remained at Altos until 1984, when he was wooed back to Wang. “I always do things twice," he explains. “Once for the experience, and the second time to get it right."

He left Wang again in 1987 to become CEO of Natural Language. And in 1998, he reconnected with a former Altos colleague and entered the venture capital business, forming Angel Investors LP. The firm facilitated some of the most highly successful acquisitions during that time, including its own acquisition by Credit Suisse First Boston in 2004.

Bozeman learned much from Dr. Wang and from his time at the company, which he applied throughout his high-tech career. He asserts that it was Wang’s unique mix of personal qualities—leadership ability, respect for each individual's value, and a strong value system—that fueled the company's success.

According to Bozeman, Wang was successful for a number of reasons. “Keeping people motivated is a huge challenge, especially when you go through so many changes.”

He adds, “Dr. Wang was criticized for being paternal. Yet, he was respectful of individuals’ worth. It mattered to him how you pay for individual value over time to keep their soul in tact. His value system created trust and loyalty.”

According to Bozeman, the company’s growth was “earned through identifying opportunities and working through implementation to get there—Wang and John Cunningham successfully meshed vision with implementation ability.”

In Bozeman's opinion, the success eventually came to an end because, “the transition to PCs presented opportunities for the company. But they couldn't get there without the partnership of Cunningham and Wang. When Wang left, John didn't have his teammate.”
“MIS was the right program at the right time for me. It allowed me to move along in my career quickly and pay my way through college.”

Fred Egan’s (UC 1973) road to high-tech success began with his first job working with computers—a contract position at MIT’s Lincoln Laboratory performing data analysis and Fortran programming on IBM mainframes. He was enrolled at Northeastern’s University College at the time, studying management information systems (MIS). UC offered classes mornings, evenings, and Saturdays, which he was able to fit into his work schedule.

Egan explains, “MIS was the right program at the right time for me. It allowed me to move along in my career quickly and pay my way through college. Northeastern fit perfectly into what I was doing at the time.”

In 1976, while still in graduate school, Egan joined Wang Laboratories, where he remained until 1984. “I joined Wang during the company’s heyday—when it was one of the fastest-growing companies in the world,” he recalls.

Egan also joined Wang during one of its major product transitions. “It had become obvious to Dr. Wang that his calculator business was moving into a high-volume/low-margin consumer business,” he explains. “Not wanting to go in that direction, he shifted the company’s focus to mini-computers and word processors and was now moving into larger, general purpose computers.”

According to Egan, when Wang was preparing its worldwide field organization to sell general-purpose computers, it needed to build in some new skills. When Egan was hired, Wang was within months of announcing the Wang VS computer line, which was aimed at IBM’s mid-range computer products. Egan notes that the Wang VS had several advantages over IBM computers at the time—speed, cost, and reduced software development time. The introduction of the VS required the Wang sales force to make sales calls on the people who managed a company’s computer center. Egan’s MIS background fit Wang’s need perfectly.

“Basically, I was going in on sales calls to help sales communicate with MIS managers,” he recalls. “As a former MIS manager, I understood the problems MIS managers were trying to solve.”

Egan’s career transitioned along with the company. Because of the success he demonstrated in supporting the sales force in the field, he was moved from support management into sales management, becoming a branch sales manager and later managing all of New England.

Eventually, due in part to the PC revolution, Wang struggled to maintain its lead in word processing, which was still a major part of its business. During this time, Egan left Wang for another Massachusetts high-tech startup called Interleaf, where he worked in business development and was responsible for establishing business partnerships worldwide.

In 1989, Interleaf’s CEO approached him to open up the Asia-Pacific region for the company. He later created Interleaf Japan, a wholly owned subsidiary in Tokyo. Two years later, Interleaf had the number-one-selling product in Japan in its market.

Egan joined Viaweb in 1996 as chief operating officer. Viaweb was one of the first companies to get a browser-based commercial application running across the Internet for online commerce. Yahoo! acquired the company two years after Egan joined.

After several years in retirement, Egan returned to the high-tech industry in his current role as CEO of GlobalLinguist (www.wordchamp.com), a company that provides innovative, web-based language-learning solutions for schools, businesses, governments, and individuals anywhere in the world, supporting any language.
David Hoirii (UC 1976) is associate general counsel and chief intellectual property counsel for Honeywell International Inc. A Vietnam veteran, he attended Northeastern’s University College from 1973 to 1976 earning a bachelor’s degree under the GI Bill. He later earned a law degree from Boston University, after which he worked briefly in a Boston law firm.

In 1979, Hoirii became the third in-house lawyer at Wang Laboratories.

Dr. Wang was interested in developing high-tech capabilities in Asia. He tapped Hoirii to help establish operations in Asia, including China, Taiwan, Japan, and Singapore. According to Hoirii, Wang knew that this was an initiative that would not produce immediate results.

“It was difficult,” he recalls. “You would not believe how primitive the environment was. There was no infrastructure, but they were quick learners.”

Developing China operations required Hoirii to assemble teams of people with Chinese backgrounds and build the trust of the Chinese government, which was wary of westerners. Negotiations began in the fall of 1980 and continued for several years. By the mid 1980s, they had a plant on the ground and running. Wang’s first joint venture in China was with the Chinese government, building small office systems.

Wang was a true technology groundbreaker, according to Hoirii. “He was absolutely the genius people think he was. Quiet. Direct. Very hands on with certain projects. He was not only technologically sharp, but also very astute in business matters.”

Hoirii adds, “His genius was to take technology nowhere near ready and do something with it. For example, Wang developed image processing for banks and financial organizations to process transactions. It was ahead of its time. The applications were pushing the limitations of the hardware.”

As an example of the impact of Wang’s genius, Hoirii explains, “After escaping China, he earned a Ph.D. at Harvard where he developed a patent that he sold to IBM—Wang was founded on the proceeds of that patent. In 1992, after bankruptcy and Dr. Wang’s death, the company discovered an old patent of his—the proceeds from this patent funded the company coming out of bankruptcy. This is a tribute to his wide-ranging problem-solving abilities.”

Hoirii recalls that Northeastern coop students played a significant role at Wang in those days. “They cut their teeth at Wang. Those skills weren’t in the marketplace at the time. They were pumped into the company from Northeastern University and other area colleges.”

According to Hoirii, many Wang alumni went on to more high-tech success, including John Chambers, who became president and CEO of Cisco; Joe Tucci, who became president and CEO of EMC; and Horis Chung, who became a principal in major Taiwan technology companies.

Regarding the ultimate fate of Digital and Wang, Hoirii recalls, “In those days, IBM was viewed as monopolistic. DEC and Wang grew up in the shadow of IBM. By developing strategies from low end to high end, DEC changed the paradigm—it scaled down the mainframe to the minicomputer. The PC did for Wang and DEC what Wang and DEC did for the mainframe.”

[“THEY CUT THEIR TEETH AT WANG.
THOSE SKILLS WEREN’T IN THE MARKETPLACE AT THE TIME. THEY WERE PUMPED INTO THE COMPANY FROM NORTHEASTERN UNIVERSITY AND OTHER AREA COLLEGES.”]
Carol Reid’s (UC 1970) early and persistent love of mathematics led her to shift career direction in the mid 1970s—leaving the security of the dental hygiene profession to make her mark in the male-dominated world of high-tech finance.

She attended University College while working part-time as a dental hygienist, taking many math courses in pursuit of her goal of being a math teacher.

After teaching health education and math for several years in the Andover public schools, Reid accepted an opportunity at Middlesex Community College to assist in creating a dental hygiene program for the college.

“This was when I first realized that I’m a startup kind of person,” explains Reid. “I really love working with people to develop programs and organizations from scratch.”

In 1976, she earned an MBA and moved her career in a new direction—one that would allow her to apply her love of math and take on new challenges. Reid accepted a management trainee position at Mobil in New York, where she learned about business and finance, including how to perform investment analysis—a skill that would prove extremely valuable when she transitioned to the high-tech industry.

After two years in New York, Reid returned to Massachusetts, accepting a position in finance at Digital Equipment Corporation. She was the first financial person in the company to perform financial investment analysis on products and engineering investments. Her experience at Mobil and at Northeastern prepared her for this pioneering environment.

$25,936,642,084.5: the peak market value of DEC, reached in 1987.

“There weren’t many women in senior positions at Digital in the early years. Frequently, I was the first or only woman in a particular role,” explains Reid.

“At Northeastern, all of my math courses were taken with engineering students. Being the only woman in these classes was challenging, but it helped me prepare for Digital and for a career in technology. It also improved my confidence and ability to work comfortably in environments where I was often the first woman.”

She adds, “What was great about Digital was that you were given the opportunity to go out on your own and figure out how to get things done. I had ever-expanding responsibility and traveled a lot. The varied nature of my roles at Digital continues to be valuable to me today.”

After 20 years at Digital, Reid left to become vice president of finance and corporate controller at Avid Technology. “It’s 10 years since I left Digital. Looking back, it was the best thing that could have happened to my career. My experience prepared me so well, and I am grateful for that.”

At Avid, Reid hired several former Digital colleagues—a tribute to the strong bond that is evident among Digital alumni. Even today, Reid explains that the connection among former Digital employees endures. She tells of a recent informal reunion that she and a couple of her Digital colleagues organized. Fifty Digital finance women attended.

Reid remained at Avid until 2006. Today, she is an advisor on public company and nonprofit boards—Enterprise Bancorp in Lowell and Family Service in Lawrence.

“There weren’t many women in senior positions at Digital in the early years. Frequently, I was the first or only woman in a particular role.”
John Sutherland (UC 1975) started at Digital Equipment Corporation in the fall of 1974 while the company was in the midst of a hiring freeze. He turned down a job at Raytheon offering more money doing systems analysis and design automation for a building they were constructing.

Explains Sutherland, “Between the two companies, I saw greater growth opportunity at Digital, and I was never disappointed.”

When Sutherland started at Digital, he was close to completing his Bachelor of Science degree in Business with a minor in technology from University College. He points out that his shift from technology to a business degree at Northeastern foretold of his career evolution at Digital from computer programming and systems design work into marketing, sales, and eventually business.

“There was a lot of room for autonomy,” says Sutherland. “Anytime you have that capability and freedom in a growing company, you can perform magic. It was fun.”

Sutherland attributes much of his eventual success in sales at Digital to the early years he spent soaking up knowledge and experience with the development and marketing of the company’s products.

“My feeling has been that it’s always good to have factory experience before sales,” he explains. “When you’re in the field, you’re at the nerve-ending of the company, and it’s really good for you to know a lot about your own company. While I was in the field, I was always able to talk to guys in Maynard and other factory locations. And so, when trying to sell Digital and its products to our new customers, I always had an advantage. I could quickly and accurately answer customers’ questions.”

Sutherland recalls, “At the time, the company was experiencing huge growth. It was a great place to be, and it was a great time in life for me. Some of the guys I worked with in the factory had so much stock in the company they were already millionaires.”

“Ken Olsen is a really kind and humble guy, and I don’t think he wanted to acknowledge we were competing against companies like IBM. At the same time, I think he felt uncomfortable about Digital being the largest employer in the state of Massachusetts,” he explains. “Then the company got larger, and it drifted away from its entrepreneurial roots.”

Sutherland spent several years in the Industrial Products Group (IPG) marketing computers and the RSX11 operating system for factory automation. He then moved to the Computer Special Systems Group, located in New Hampshire. He relocated to California in 1978 to work in Digital’s Los Angeles district sales office.

“This was a major part of my transformation from technologist to business guy,” explains Sutherland.

He was highly successful in the sales operation, achieving more than 300 percent of his goal by his third year in the field. Sutherland continued in Digital’s Los Angeles office until leaving the company in the summer of 1981.

After Digital, Sutherland remained in California working for several other technology companies, including Land Resources Management, JPL, MDB Systems, and Kingston Technologies. He returned to the East Coast four years ago, forming his own company, Highlander LLC (www.highlander.com), located in Portland, Maine.

DEC’s 5.25-inch disk drive had 280 megabytes of storage space. Today, the typical flash memory card in a digital camera holds 1 gigabyte of memory storage.
Tom Racca’s (UC 1984) last-minute decision to turn down a math scholarship to Holy Cross in 1976 and pursue the computer sciences program at Northeastern hints at the kind of calculated risk taker he is.

While at Northeastern, he learned that Prime Computer Systems, a private company, was looking for coop students. He was interested but was advised against it since the internship was intended for seniors, and Racca was a first-year student. Nevertheless, he set up an interview with Prime, sold himself, and landed the job. He had also received an offer from Digital, but chose Prime because it was a smaller company. He ended up working 13 years for Prime.

Racca explains, “I thought that I could contribute more at Prime, be involved in more areas, and be able to stand out more than at a much larger company like Digital.”

Racca guessed right. He had the opportunity to work in a range of different departments—marketing, technical support, and engineering—gaining valuable experience, while making a real contribution to the company’s success.

Prime offered to pay for Racca’s Northeastern education if he would work full time. He started taking courses at Northeastern’s University College at night.

“I really enjoyed taking classes where most instructors came out of the real world,” he recalls. “They talked about their experiences and how the material related to real issues. Classmates’ experiences were from the real world, too.”

Prime went public, and in 1984 Racca was offered the opportunity to establish a new R&D operation in Australia. He spent two years there growing the operation.

In 1990, after leaving Digital, Racca went to work for four years at Proteon, a networking startup. He then moved to Avid Technology and in 1995 went to work for Digital.

“What was interesting about Digital at the time was that the PC business unit was building products based on Intel chipsets and competing against their flagship Alpha technology and chipsets,” he explains. “This division only wanted people from outside of Digital working in this unit. It was a way for me to define my role there.”

“At Digital, everyone knew this icon was going to go away,” he recalls. “There were a number of missteps. I don’t think technology was the reason. The PC unit still had the spark of entrepreneurship, an air of defiance. It was like ‘the behemoth around us may be dying, but there’s still a beating heart here.’”

After Digital, Racca joined KPMG’s consulting organization. He then went on to found a new company, iQ NetSolutions, which he successfully sold after five years. His entrepreneurial spirit brought him to another startup, Chantry Networks, which he then helped sell to Siemens Communications.

Racca then founded a management advisory firm, Racca Associates, LLC, which focused on technology and life sciences. Today, he continues to manage the advisory firm while also serving as vice president of marketing for Colubris Networks and as COO of a life sciences startup.

In reflecting on his experience during Massachusetts’ high-tech heyday, Racca says, “Many other companies were born as a result of the great people who built this industry right here in New England.”
In 1987, a gallon of gas cost 89 cents.

In 1987, NU alum, the late Reggie Lewis was drafted to the Boston Celtics.

Mike Dukakis was serving an unprecedented third four-year term as Massachusetts governor in 1987.

October 19, 1987, was Black Monday. Stock market levels fall sharply on Wall Street and around the world.

In March 1987, Bill Gates officially became the first PC billionaire.

Background information for this feature was gathered from the following sources:
The first spam in computer history was sent on May 1, 1978, by a Digital employee.

**GET IN TOUCH WITH HIGH-TECH COLLEAGUES**

**WANG LABORATORIES FRIEND FINDER**
http://www.tjunker.com/wanghi.html

**DIGITAL ALUMNI GROUP**
http://www.decalumni.com/index.html

**PRIME AND COMPUTERVISION ALUMNI**
http://primecvreunion.ning.com/

**THE 495 NETWORKING SUPPORT GROUP**
http://www.495ng.org/default.asp

The Apple Macintosh was introduced in January 1984.
“When you make a planned gift, you live longer,” jokes Beryl Bunker UC ’62, MBA ’67. Beryl, now 88 years old, established several charitable gift annuities with Northeastern over the years that provide her with a very attractive, guaranteed annual income for life. And, the payments she receives are taxed advantageously.

Beryl is dedicated. She enrolled in classes at University College and devoted herself to earning two degrees, while advancing her career at John Hancock Company.

Since retiring in 1984, Beryl has dedicated her life to giving back. She wants part-time students to have the same opportunities she had—to earn a degree and advance their careers.

Beryl says, “As someone with an investment background, I knew charitable gift annuities were a great way to give back. You’ll be surprised how much joy you get from giving the gift of education to a deserving student. It’s a wonderful feeling.”

Establishing a charitable gift annuity is an excellent way to make a gift to the School of Professional and Continuing Studies. In exchange for a gift of cash or securities, you receive: fixed income payments for life (to you and another, if you choose), minimized capital gains tax on appreciated securities, an immediate income tax deduction for a major portion of your gift, favorable tax treatment on your annuity payments, and the satisfaction of knowing that you will be helping students in the years to come.

For more information, or to receive an illustration on how a gift will work for you, please contact Carla Kindt, director of development, at 617.373.2724.
Scott Carlson is an instructor at Northeastern’s Lowell Institute School, where he teaches Introductory Physics.

“My main goal is to develop problem-solving skills, and to impart some basic ideas about the way the universe works,” says Carlson. “That is to say, for the most part, we live in a place where there are laws that describe how and why things work, and some knowledge of those laws can allow us to predict how we expect things to happen—in the natural world, anyway—in the future.”

It wasn’t until Carlson took a break from teaching that he realized how much he enjoyed it and his students, and that he had chosen the right career path.

“I definitely feel a calling to the profession,” Carlson explains. “I took a year off from teaching close to 15 years ago, and found that I really missed it. I had thought that I was more of a ‘techie,’ but found that I am much more of a people person than I realized. I really enjoy working with young people, and physics is a great subject. It enables me to witness the ‘a-ha’ moment among my students, and encourage them to be successful in a subject that they thought they might not be able to succeed in.”

Carlson earned a Bachelor of Science in Physics from Wittenberg University and an Master of Education in Secondary Science from the University of Massachusetts. He was a graduate intern at Digital Equipment Corporation from 1986 to 1987, having arrived at Digital as part of UMass’s MESTEP program—Math, English, Science, Technology, and Education Project.

This program was created to address the shortage of science teachers in the 1980s. At the time, most science majors were being recruited for government projects like Star Wars. Digital started Carlson in sales training. When they discovered his physics background, they began to assign him small projects, ranging from database management to researching a specific topic and even writing low-level code. His internship lasted half a year, after which Carlson continued to work at Digital during several summers.

“It was interesting to see the workings of a large company,” he explains. “As physics majors, we were told that we had to become computer programmers. Today, if you have a need, you can go out and buy a program. Back then, you had to know how to program and how to write code to solve problems. During my time at Digital, I realized the general power of the computer.”
Paul Tsang, PE, has been an adjunct instructor for the Lowell Institute School, since 1998, where he teaches fluid mechanics and thermodynamics.

Most of his students have full-time jobs and are enrolled in the part-time degree program. According to Tsang, “They are more mature and serious in learning.”

Tsang takes seriously the responsibility of educating the next generation of engineering professionals. He believes that students are able to relate the theories and the fundamentals they learn in the classroom to the practical problems they are likely to encounter in the real world. So, he organizes tours of power and utilities plants in the Boston area in order to expose them to real-world environments.

“I like using real-life examples for the fluid and thermo applications,” he adds. “Why certain machines or systems are designed in certain ways. What’s happening in the industry.”

Tsang’s goal is for students to come away from his classes with a deep interest in the subject of fluid mechanics and thermodynamics and a desire to continue to explore the engineering field.

Tsang is not only a member of the faculty, but also a Northeastern alumnus, having earned a Bachelor of Science in Mechanical Engineering in 1984 and an Master of Science in Mechanical Engineering in 1987. The Northeastern coop provided him with valuable work experience before graduation. “Working in the industry confirmed that I was on the right track for my career.”

With his mechanical engineering background, Tsang landed a position at Digital Equipment Corporation as senior facilities engineer, where he worked for four years in the late 1980s. “I started working there in 1986,” he recalls. “Digital was the largest employer in Massachusetts at the time, a fast-growing high-tech company providing promising career opportunities.”

He explains, “I was responsible for the mechanical building systems design in the facilities such as the central chilled water plant, cooling towers, boiler systems, and air-conditioning systems for over one million square feet of facilities in the Marlboro and Maynard areas.”

In 1990, he moved on from Digital. Currently, Tsang is principal mechanical engineer in the life sciences division of Parsons Corporation, handling projects on pharmaceutical facilities in Maryland and Puerto Rico.

The Lowell Institute School was founded in 1903 by the Lowell family with the goal of providing educational opportunities to individuals seeking to advance their careers by securing a technical education. In September of 1996, the Lowell Institute School moved to Northeastern University from MIT, where it had been previously administered. Today, the School is an integral part of the School of Professional and Continuing Studies, offering a diverse array of technical programs in the areas of engineering, computer-aided design, environmental studies, construction trades, geographic information systems, and the physical sciences.

The Lowell Institute School has over 500 undergraduate and graduate students and grants dozens of degrees per year. Professional development programs are also a major pillar of the School’s activities. Today, the Lowell Institute School student population is composed of nontraditional adult learners from around the world, many of whom are recent immigrants to the United States. Scholarships are made available to current and newly enrolled students through the ongoing generosity and support of the Lowell Institute, a major philanthropic donor in Greater Boston. Graduates are hired into highly technical jobs at companies across the business spectrum in Massachusetts and throughout New England.
SPCS Provides Scholarships to Massachusetts Promise Fellows and Helps Grow the Program

After graduating college in Iowa, Whitney Soenksen began applying to AmeriCorps programs. When she came across the Massachusetts Promise Fellowship, she knew it was the right fit for her. Unlike other programs, the Massachusetts Promise Fellowship enabled her to continue her education at Northeastern University, while working as a Fellow.

As a group, Fellows work toward five promises: caring adult, healthy start, safe place, marketable skills, and opportunities to serve. Whitney and 29 other Fellows from around the country arrived in Boston to participate in the program (although the program is statewide). “It was a great way to be introduced to both the program and the city,” she explains.

“You have immediate access to people who are going through the same experience at the same time.” Fellows meet once a month to share experiences from their host sites, thereby building a network of colleagues and friends.

In addition to working at a host site, each Fellow works in partnership with that particular organization. Some host organizations across Massachusetts include: Asian Community Development Corporation, Boston Partners in Education, Boston Cares, Mass Mentoring Partnership, AIDS Action, The Medical Foundation, the City of Brockton Mayor’s Office, Stoughton Youth Commission, and Sociedad Latina.

At the volunteer agency Boston Cares, Whitney directed the Youth and Family program, which had been running for less than a year. The position gave her the opportunity to manage a program, make key decisions for the organization, and take on a leadership role.

“In college, I was a journalism major but decided not to follow that path. I wanted to work for a nonprofit and needed some hands-on experience. If I had taken an entry-level position, I never would have gained the experience that I did as a Fellow. The Fellowship allowed me to build on my skills and background in journalism and use them in a new way to benefit the organization.”
“I WANTED TO WORK FOR A NONPROFIT AND NEEDED SOME HANDS-ON EXPERIENCE. IF I HAD TAKEN AN ENTRY-LEVEL POSITION, I NEVER WOULD HAVE GAINED THE EXPERIENCE THAT I DID AS A FELLOW.”

Whitney began taking courses toward the Graduate Certificate in Nonprofit Management at Northeastern’s School of Professional and Continuing Studies (SPCS). She then decided to stay on for another year and earned a Master of Science in Leadership, graduating in August 2007. “I liked how the Leadership program was structured,” she notes. “It combined action-based projects with leadership theory, which gave me a great perspective. I was able to evaluate myself as a leader and then work on the areas that needed improvement.” Whitney particularly enjoyed the diversity of her classes at SPCS, as students reflected a broad range of industries and backgrounds. She now works in Membership Communications at the Massachusetts Coalition for Occupational Safety and Health.

MASSACHUSETTS PROMISE FELLOWSHIP PROGRAM

Each spring, the Massachusetts Promise Fellowship recruits new Fellows. These emerging leaders spend a year of their lives delivering the resources that young people need to be successful in life by mobilizing and organizing community activity, creating and leading powerful civic initiatives, and training and inspiring citizen volunteers. During a year of AmeriCorps service, Fellows serve full-time with nonprofit organizations, schools, and state and local agencies throughout the Commonwealth.

Fellows have mobilized community activity in a variety of ways, including:

- Coordinating mentoring partnerships and programs
- Conducting health insurance outreach
- Leading after-school programming
- Creating and staffing teen councils and coalitions
- Establishing youth service programs

For more information on applying to the Massachusetts Promise Fellowship, please visit: www.masspromiseFellows.org.
**RECENT EVENTS**

**[SPEAKER SERIES]** The Alumni Leadership Forum includes a series of lectures from prominent University College alumni who have achieved great business success. Tony Truesdale, UC ’92, MBA ’97, president of Vitamin Shoppe, spoke to students and alumni about success factors in business on February 5. Jean Kovacs, UC ’83, senior vice president of Sterling Commerce and former president and CEO of Comergent Technologies, spoke to students and alumni about leadership on March 11.

**[PANEL DISCUSSION]** On March 7, SPCS, in partnership with the Consulate of Japan in Boston, co-hosted industry leaders and NU faculty from across the world of science, engineering, and research for a panel discussion on bioscience and nanotechnology research. The event was held at the Alumni Center and 75 guests attended.

**[YAO MING]** Global Pathway students meet Yao Ming at a Celtics vs. Rockets game.
**NAPLES LUNCHEON** Lunch with Dean Hopey provided alumni the opportunity to reconnect with each other and receive an update from the Dean about happenings within the School.

**RED SOX VS. NORTHEASTERN** The annual Northeastern University vs. the Red Sox baseball game at spring training was a resounding success. Over 120 SPCS/University College alumni were in attendance. Alums enjoyed a cookout and then the game.

**SARASOTA RECEPTION** Alumna Victoria Domenichello-Anderson (UC ’82) hosted this Sarasota Reception at Expressive Arts Florida, Inc., an art gallery and studio situated in Towles Artist Colony, Sarasota. Following an intimate reception, attendees learned about expressive arts as a pathway to healing, and then had the opportunity to participate in their own artistic expressions.
Janice is a budget analyst at Antigenics, Inc., and serves as its president.

Jean-Gardy currently lives in Cranston, Rhode Island, and works as a section manager/associate for Brown Brothers Harriman.

Mason P. Fleming [RCC - UC '67]
After serving in the Green Berets/Special Forces from 1960 to 1963, Mason joined IBM full time and continued his education nights until graduating in 1967. He left IBM in 1974, taught high school in Dartmouth for two years, and then bought a general store in Maine. After seven years, Mason joined a career management firm in Boston; opened his own firm in Tampa, Florida; and has been in career management since 1984. After retiring in 2002, he was asked to come to Charlotte in 2004 to rejuvenate a career management company. Retiring to Texas in 2006, he was asked to come to Memphis to save an office. He has done so, is getting married, and is moving back to Texas in March 2008 and might even retire. Please email Mason at: jobdr@msn.com and access his website at: jobbdoctorinternational.com.

Janice Jackson [SPCS '06]
Janice is a Budget Analyst at Antigenics, Inc., and lives in Arlington, Massachusetts.

Teresa Koczorowski [UC '96]
Since completing an undergraduate degree at Northeastern in June 1996, Teresa has followed her career interests in the healthcare field. Specifically, she has worked on the healthcare administrative side, achieving longevity with one of Boston’s renowned healthcare facilities, Beth Israel Deaconess Medical Center, for close to two decades. Teresa completed a medical billing and coding program and passed the national certification examination administered by the American Academy of Professional Coders. She tries to keep up with being a lifelong learner, and has undertaken continuing education in a master’s program in healthcare administration. Teresa likes to run and cycle and has completed 13 marathons, including running the Boston Marathon six times and the New York Marathon twice. She also volunteers for the Boston Marathon and for the Multiple Sclerosis Society in 150-mile bicycle tours.

Susan Lowe [MS '97, SPCS '07]
Susan resides in Peabody, Massachusetts, with her husband. They try to golf as much as their work schedules allow. She has been teaching at Northeastern since 1989 in either a part-time or full-time capacity. Currently, Susan is the associate chairperson of the physical therapy program and does per-diem work for Partners Home Care.

David L. Mortensen [SPCS '06]
David graduated from University College in 2006. He is retired and lives in West Virginia. In recalling his time at University College, David says, “All my classes stand out in memory, especially in pathophysiology, biochemistry, and my two final labs in genetics and biochemistry.”

Javier Noguchi [UC '02]
Javier graduated in 2006 with an associate of science degree in genetics and biochemistry. He is a voice analyst for Partners Healthcare Systems in Boston. He plans on attending graduate school in the fall. Paul enjoys traveling, and is an avid Red Sox fan.

Kathleen Ogår [UC '95]
Kathleen started taking classes at University College, Northeastern in 1985 and graduated in 1995. During that time, she also raised her daughter, worked full time, and in 1992 married her husband Kevin. A lifetime learner, she continued her education over the next 10 years, studying holistic healthcare. After successfully working for 18 years in a corporate setting, Kathleen started her own practice and joined the National Health Group in 2007. “We are a family and general healthcare practice offering nutritional counseling, homeopathy, and acupuncture services.” The practice moved last July to its new location at the Hanover Wellness and Medical Center at 20 East Street in Hanover, Massachusetts.

Scott Current lives in Gainesville, Florida, and is a senior account executive at Naylor.

Rick Pieslak [UC '71]
Rick earned an associate degree in civil engineering from Wentworth Institute in 1963 and a Bachelor of Industrial Engineering Technology from University College in 1971. He is in his 39th year as a civil engineer with the Commonwealth of Massachusetts (Mass. Highway Department), and has been married to the former Maureen Ryan of North Billerica for 39 years. Maureen is a registered nurse. Rick and Maureen have two adult married children. His daughter, Melissa Ann, married Sean Curry of Maynard in 1998, and they have two children Ryan Patrick (5) and Matthew Leo (3). Rick’s son, Steven, married Juliette Fox of Lowell, Massachusetts, in August 2007.

Paul Poirier [UC '03, SPCS '07]
Paul lives in Ipswich, Massachusetts, and works as a voice analyst for Partners Healthcare Systems in Boston. He plans on attending graduate school in the fall. Paul enjoys traveling, and is an avid Red Sox fan.
KrisHNa raMaCHANDra [uc ‘00]
Krishna graduated from University College in 2000 and currently works at Brigham and Women’s Hospital as a technician.

Cheryl Scott [uc ‘97]
Cheryl graduated from University College in 1997. She currently lives in Brentwood, New Hampshire, and is a stay-at-home mother of two children, ages seven and five.

Paul TuMolo [uc ‘78, ’81]
Paul continues to manage the consulting business he started in 2002, Edusult Performance Systems in Medway, Massachusetts. Edusult specializes in people and process improvement projects in the following industries: medical devices, financial services, customer service, operations, and new product introduction.

Paul also is active in teaching as a member of the faculty at Harvard’s Extension School, specializing in operations, project management, and customer relationship management. He was named “Teacher of the Year” in 2005.

“The foundation of my professional life is based upon the great education I received at Northeastern. I am forever grateful for the learning and knowledge that have helped me succeed over the past 25 years,” he notes.

KenneTh rOErDEN [bb ‘54]
Kenneth graduated from University College in 1973. He is retired and says that he is “still hanging in there and enjoying things at age 93.”

miLT zWerlinG [li ’61, UC ‘64]
Sadly, Milt passed away in August 2007. He was a member of the Sigma Epsilon Rho Honor Society.

Victoria Domenichello-Anderson graduated from University College in 1982 with an associate degree in Law Enforcement and a Bachelor of Science in Fine Arts. She went on to the Massachusetts Department of Revenue and worked her way up to an investigator position with the Internal Affairs division.

In 1998, Victoria moved to Sarasota, Florida, and found a way to combine her passions for art and helping people by becoming a registered expressive arts consultant educator. She recently founded Expressive Arts Florida, a gallery that allows children to use art-making to heal from abuse and then displays their work. She also works with cancer survivors in the Arts and Medicine program.

“The Expressive Arts process allows me to use my passion for art and my dedication to humanity for the betterment of people and society.”

Recently, the School of Professional and Continuing Studies held a gathering for alumni from the Sarasota area at Victoria’s studio.
ENCORE ASKED ALUMNI TO SEND IN THEIR PHOTOS AND THOUGHTS ON BEING “A RED SOX FAN IN EXILE.” HERE ARE TWO HEARTFELT RESPONSES:

WANDA FISCHER exiled in: Upstate New York

Wanda Fischer grew up in Weymouth, Massachusetts, and began following the Red Sox in 1956, when she was not quite eight years old. As Wanda notes, she has “stuck with the team through thick and thin.” She graduated from University College in 1975.


Her children live in the Boston area, where they carry on her loyalty for the home team. “My heart’s right there,” says Wanda. “It’s on the grass at Fenway Park waiting for the call to “Play ball,” for the first pitch of the season, for the crack of the bat, for the lights on the CITGO sign—for the feeling of being home.”

DAVID HOLLAND exiled in: Lawrenceville, New Jersey

David Holland writes that he lives “on the front line” in Yankee country. A lifelong Boston resident, David moved to New Jersey in 2003.

“I now have one World Series trophy per kid—but I need to keep going,” he adds. David would like to say “hi” to all his friends in Boston and at Northeastern. He graduated from University College in 1999 and 2002.
Technology is evolving, with or without you. But a degree or certificate in innovative program areas such as 3D Animation, Digital Media, Game Design, Geographic Information Systems, Information Technology, and Project Management offers the knowledge and skills needed for the next big breakthrough. Our flexible formats fit into your busy life with options to complete courses online or at one of our four campus locations. There’s no limit to how far a degree or certificate from Northeastern University’s School of Professional and Continuing Studies can take you.

877.6NU.SPCS
www.spcs.neu.edu
Online and four Boston-area locations.
Encore Magazine is published for the alumni of the School of Professional and Continuing Studies, University College, the Lowell Institute School, the Boston Evening School, and the School of Education. www.spcs.neu.edu