Do you really know what a technology career is like? Find out—details inside.

MIRANDA MONAHAN started in IT as a receptionist — she was recently named one of the “Top 50 Women-Led Business Leaders” in Florida.

DALE BURKETT has found a way for technology to work for him — not the other way around.

MELISSA LOPEZ sees the IT industry as an equal opportunity employer.

INSIDE:
GAIN THE ABILITY TO CHANGE YOUR WORLD.
See Lakecia’s story on page 7.

IT IS NOT JUST A DESK JOB.
See Robert’s story on page 14.
Myth: You have to be great in math and science to be successful.

Truth: Most tech jobs don’t require much math or science beyond the basics.

WHAT’S INSIDE

Career Snapshots: A career in IT has changed their lives. It can change yours, too.

IT Job Spotlights:

- Entry-Level Position  P.6
- Helpdesk Technician  P.9
- IT Security Professional  P.10
- Network Administrator  P.13
- Mobility Expert  P.15

Learn more.
It turns out that most of the math and science taught in high school is not what IT ("eye-tea") workers use in their jobs.

IT stands for information technology. Most people think about information technology as computers, smartphones, the Internet, networks, hard-drives and servers.

But IT is really about people.

Getting people the information they need, when they need it. Figuring out ways to make their work (and their play) flow with the technology.

Training in IT can prepare you to work in healthcare, sports, retail, fashion, hospitality, banking — or any other industry you can think of.

Are you a people person? Are you a problem solver?

Then consider becoming an IT professional, one of the fastest growing careers on the planet. High salaries. Career advancement. New challenges every day.

Keep reading — and find your path in IT.
When a company has a lot of computer data it needs to recover, it needs the power of M — Miranda Monahan, that is. Miranda Monahan, 37, is the president of M-PowerTech, the company she founded in Bradenton, Florida, in 2011. And, to think, she started out her IT career as a receptionist.

In 2000, she was just in college, answering the phone for a small IT dot-com company that sold hardware such as desktops, laptops, printers, servers and accessories. The longer she worked there, the more she learned about the products and services the company was selling.

“Every day the director of sales would walk in and I’d ask her, ‘When are you going to hire me on your sales team?’” Monahan figured she could sell product, too — and make a lot more money doing that than just routing calls.

The sales director made her a deal: If someone called the office looking to buy a product or service, Monahan
Test Drive an IT Career

Learn more about what an IT career is like directly from the people in it. Watch the videos to see how varied and fulfilling an IT career can be:
www.comptia.org/testdrive

Adrienne: Help Desk Technician

John: Web Manager

Matt: IT Systems Engineer

INFORMATION TECHNOLOGY JOBS – MEDIAN SALARIES

<table>
<thead>
<tr>
<th>Job</th>
<th>Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Support Specialist</td>
<td>$54,960</td>
</tr>
<tr>
<td>Web Developer</td>
<td>$68,670</td>
</tr>
<tr>
<td>Network and Computer Systems Administrator</td>
<td>$79,770</td>
</tr>
<tr>
<td>Database Administrator</td>
<td>$82,280</td>
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<tr>
<td>Computer Systems Analyst</td>
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<td>Information Security Analyst</td>
<td>$91,600</td>
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<tr>
<td>Software Developer</td>
<td>$95,280</td>
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<tr>
<td>Computer Network Architect</td>
<td>$100,710</td>
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Keep reading — and find your path in IT.
The technology sector isn’t the only industry to benefit from IT. Almost every industry — from professional sports teams to record labels to fashion houses — hires individuals with IT experience every day. It doesn’t take years of training to get up to speed on the practical IT applications in your chosen field. Establishing a good foundation takes less time than ever and offers a strong advantage in the job market.

The CompTIA IT Fundamentals exam helps you learn more about the world of information technology. It focuses on the essential IT skills and knowledge, including:

- Identifying and explaining computer components.
- Setting up a workstation, including conducting software installations.
- Establishing network connectivity.
- Identifying compatibility issues and identifying and preventing security risks.
- Managing the safety and preventative maintenance of computers.

The IT Fundamentals certification is ideal for you if you’re considering a career in IT or if you work in an allied field that requires a broad understanding of IT, like in a sales role at an IT company.

Fact:
The average income for entry-level IT job (customer user support) is $54,960.
Source: U.S. Bureau of Labor, May 2014

Learn more.
Lakecia Gunter noticed how the magazines and books were piling up in her mother’s house. Her mother, a diabetic, had recently lost vision in one of her eyes.

Lakecia turned to her company’s technology for help. She reached for the Intel Reader, which allowed her mother to see the writing on the page “and feel like a whole person” again.

To her mother, it felt miraculous to be able to read again. To the daughter, it was just the sort of thing a computer engineer does every day: She uses technology to solve a problem.

“Each and every day I have the ability to help people,” Gunter said.

Gunter, 40, grew up near Orlando, raised by her hard-working single mother. When she was 11 or 12, her mom bought her a Commodore 64 computer, the best-selling personal computer at the time, which cost $595 (about $1,400 in today’s dollars). That set the young girl on a path of trying to understand how to program computers and use them to transform reality.

In the 1990s, Gunter attended the University of South Florida, located in Tampa, and studied computer engineering, then attended Georgia Tech for a master’s degree in electrical engineering. She started her career as a design engineer with Freescale Semiconductors, formerly known as Motorola, where she did extensive work designing microcontrollers for airbags and anti-lock braking systems and other electronic components for automobiles.

In 2008, Gunter was recruited by Intel, the world’s largest semiconductor chip maker, to be a technical program manager. Four years later, Gunter moved over to Intel Labs, the company’s world-class research and development organization, to work as the technical assistant and chief of staff to Intel’s chief technology officer. The position requires her to spend extended time with the company’s top technical officer, assisting him in setting the research agenda and establishing technology priorities for both Intel Labs and the company.

Gunter tells those who are considering pursuing a job in information technology, “Imagine all the realms of possibility that are available in IT. What would you like to do? What would you like to see change? You have the ability to change your world.”

Read Lakecia’s full story at http://tinyurl.com/q9u7dsd
Tech Adventurer

Finding a way for technology to work for him — not the other way around.

Dale Burkett credits the beginning of his career with a basic fascination with technology. “I was always an early adopter. I was walking around with a blue light in my ear and everyone was like, ‘What is that?’ and I said, ‘It’s Bluetooth!’ I’m fascinated by technology and watching the market to see how it evolves.”

Burkett was at first an unlikely candidate for a tech career. He grew up in Trinidad, a Caribbean country where, in the 1970s and 1980s, computers were rare to come across. Burkett successfully lobbied his father to buy one. “Dad had the foresight to make that investment in my future,” he recalls. When his family immigrated to Brooklyn, Burkett was delighted to find computers in his school. His high school years were spent focused on learning all he could about the machines.

Thinking the degree would help him learn even more about computers, Burkett enrolled in college at City College of New York for electrical engineering. Surprisingly, he found himself losing interest in classes. So he took some time off to work for Macy’s in the store’s electronics department. “I needed a new start,” he says, so he transferred to North Carolina State University in Raleigh, North Carolina, to study mechanical engineering, which helped him understand the cooling, components and measurements of a circuit board. Even more important, he realized he loved the problem-solving nature of engineering.

“The engineer is no longer the guy with the pocket protector. It’s someone who sees a need and develops something to meet that need. Just having that natural inquisitive nature and the methodology to figure out a solution is important.”

A college internship at IBM in Research Triangle Park in North Carolina turned into a full-time position after graduation. When IBM’s laptop manufacturing division was acquired by Lenovo in 2005, Burkett moved just six miles away to Lenovo’s new North American headquarters. At Lenovo he transitioned into a new key role every few years. In 2014, he became senior manager of the company’s enterprise storage team, ensuring that client companies worldwide have the required amount of server storage space available to them exactly when they need it.

Moving up from purely technical positions into management has been a gradual and rewarding progression for Burkett. “It’s all about evolving. It’s adding to the bank of knowledge that I have. It’s another feather in the cap.”

Looking back on his career in tech, Burkett sees that he has found a way for technology to work for him — not the other way around. “Some look at technology as intimidating, but it’s not. We are the masters of technology.”

Learn more about Dale’s story at http://tinyurl.com/nq8uwfo
HELPDESK TECHNICIAN

Working the helpdesk is a great way to get started in IT. If you know your way around your computer and have mastered your smartphone, you may already have the basic skills to get started. Companies are looking for employees with:

• Excellent problem-solving skills.
• Patience.
• An ability to multitask.
• An interest in learning about new technologies.

Not only are you helping individuals find solutions to their problems, by recording and tracking the kinds of problems customers confront, you can also help the software and hardware designers improve the product.

Companies are hiring all over the U.S., so helpdesk positions are available in places where you want to live.

Even if you have your IT career all mapped out, it doesn’t hurt to keep your options open. The first steps in training and certification allow you to gain universal skills in a variety of technologies and operating systems.

This will help you:

• Earn a higher salary.
• Have a competitive edge among qualified candidates.
• Find more potential career opportunities.

Fact: A candidate’s customer-service skills are rated by many tech employers as being just as important as technical ability.

CompTIA A+ Certification: http://certification.comptia.org/aplus

CompTIA A+ certification will quantify your skills, placing the depth and range of your experience in one internationally recognized credential. So whether you want to be a network administrator, field tech or IT specialist, take the first steps to boost your prospects and ensure a brighter career future.
Internet and computer security are at greater risk of breaches and hacks than ever. IT security professionals have the same cutting-edge skills as hackers but use their knowledge to defend privacy, secure businesses, protect governments and safeguard individuals.

Fact: Hundreds of thousands of cybersecurity professionals are in demand. The average IT security pro makes more than $91,600 a year. 

IT SECURITY PROFESSIONAL
CompTIA Security+ and CompTIA Advanced Security Practitioner (CASP) certifications offer diverse professional career paths. Here are just some of them:

- **Computer Crime Investigation**: You trace attacks by hackers and others who have gotten past security.

- **Security Systems Testers**: By hacking for the good guys, you use your skills to find the weak links and back doors in security systems.

- **Security Design and Implementation**: You create and maintain systems that protect software, computers, and mobile devices from spyware, hacking, viruses, and other security breaches.

Learn more.
Richard Rieben went into IT directly after high school and later went back to college, but kept adding IT certifications and cybersecurity skills to propel his career. While he was working, he attended classes online and in-person and earned an associate's degree in business management from Sinclair Community College around age 30. He then continued his education at Western Governors University and completed a bachelor's degree in business management and later completed his MBA in IT management.

In addition to his formal studies, Rieben earned several industry certifications, including CompTIA Security+, CompTIA Project+, CompTIA Network+, and his CISSP, PMP, FITSP-M and Certified Scrum Master certifications. With his experience, education and certifications, he evaluates cybersecurity threats and vulnerabilities to determine how to protect various IT systems and websites.

He ultimately took on a role providing cybersecurity and IT project management expertise as a contractor for the United States Air Force at Wright-Patterson Air Force Base in Fairborn, Ohio. He also works as an operations manager for Robbins Gioia, headquartered in Alexandria, Virginia, and helps clients assess and overcome gaps in their cybersecurity positions. With Rieben's assistance, organizations can better understand their risks and learn to combat ongoing cyber-threats.

“First, start with the basics. Keep in mind that IT is a field that is constantly shifting in terms of tools and technologies, but if you want to break into IT as a career field be sure to address soft skills that are always in demand. Hiring managers want employees who can think on their own and communicate effectively with co-workers and superiors.

“Second, find yourself a mentor.

“Third, never stop learning.”

Riebens recommends three things to people who want to pursue a career in IT:

Learn more about Richard’s story at http://tinyurl.com/nq8uwfo

Keeping America Safe from Cyber Threats

Help organizations understand their risks and learn to combat ongoing threats.
The way Melissa Lopez sees it, the IT industry truly is an equal opportunity employer.

“I definitely believe women can succeed just as much as men in IT,” says Lopez, call center manager for ASI System Integration. “The female technicians who work here — the field technicians, the system engineers — are some of our best people.”

In her role at ASI System Integration, Lopez ensures that customers get the technical support they need.

“The computer is used for so many things — paying bills, running businesses — so when the computer is down, making sure that it is running again is my main concern,” she said.

And the IT industry definitely represents opportunity for people who enjoy working with others, she said.

“People skills are important,” she said. “Even when you don’t know exactly what to do, having people skills and a proper dialogue with the customer gives you the opportunity to figure it out or time to look it up.”

And for women who are motivated, the IT industry has no glass ceiling, Lopez suggests.

“The more you learn, the more you’re worth,” she said. “Technology is a great field to be in because it’s in everything, and it’s growing every day. This is a technology world.”

Hear Melissa’s story — as well as those of other IT professionals at www.comptia.org/testdrive

Opportunity for All

It’s a technology world and it’s growing every day.
NETWORK ADMINISTRATOR

Network professionals are essential personnel who keep their entire organizations connected, whether it's a small garage startup or an international company. It's a position that requires not only insight into how your group works, but also how to grow the network to its full potential.

CompTIA Certification: http://certification.comptia.org/networkplus

• In restaurant management, duties include detailing inventory, tracking profit margins and enacting payroll. A restaurant manager with top-notch networking skills ensures a highly efficient and profitable restaurant.

• Financial consultation firms must keep their client information not only secure but also up to date. At such a firm, you might be responsible for accounts of up to millions of dollars in value and subject to constantly fluctuating economic conditions.

• In a hospital, electronic patient records must be readily available for doctors and nurses to provide the best care. Here, your work will fulfill your organization's mission for excellent health care and service to the community.

Fact: Learn to install, configure and administer networks and you can bring home an average salary of $79,770 a year.

Source BLS.gov, May 2014

Keep reading — and find your path in IT.
Bridging IT with the Great Outdoors

Not the lifestyle most people think of when it comes to IT careers.

High on a mountain in Colorado, an access gate to a ski lift at Aspen Snowmass isn’t coming online. It’s early in the morning, before any of the lift attendants are on site to report the problem, but from a command center a few clicks away, Robert Blanchard identifies and troubleshoots the problem — all over his morning coffee.

Blanchard and his team handle all of the technology-related problems for Aspen Skiing Co., a four-mountain chain of destination resorts in the remote Rocky Mountains. Running the helpdesk for a destination ski resort isn’t what most people think of when it comes to IT careers, but the busy group of outdoorsmen and women enjoy their indoor-outdoor lifestyle.

“One of the nice things about working for a ski area is that it’s like working for many different businesses,” he said. “You get in a car, drive to a ski area, go up the mountain, make repairs and snowboard back down.”

“Everything on our mountain is computerized,” Blanchard said. Some software tracks what trails were groomed overnight, how much snow fell and its consistency. Other software communicates with the trail grooming machines, called Snowcats, to track mileage, GPS information, acres per hour, tiller, gas and other usage data. Another program runs the snowmaking guns. The resort uses 850 computers and the department has grown to 18 people, with six on the helpdesk.

When hiring, he looks for self-confidence, a high level of commitment when troubleshooting and a passion for customer service. People who join the helpdesk end up staying because of the positive experience and the chance to play around with fun and interesting new technologies.

Certifications aren’t the first thing he looks for when hiring, but they certainly carry some weight. “If I have two candidates applying for the same job and they both seem to have the other qualities that we’re looking for, the person with the certification is the one who is going to get hired,” he said.

Learn more about Robert’s story at http://tinyurl.com/nfu44nu
MOBILITY EXPERT

Companies are struggling with how to let employees use a multitude of their own personal devices, like smart phones and tablets, while keeping their company information secure. They need IT professionals who understand the complexities of mobility.

Mobility experts understand all the different mobile technologies in the office as well as over-the-air systems that will dominate business operations in the coming years. The CompTIA Mobility+ certification shows that you can set up, migrate, support and manage mobile environments for employers while executing the best security measures to reduce threats. The Mobility+ exam also covers specific security and remote access concerns for mobile device management. As a result, you will be able to use mobile technologies with confidence, no matter the vendor, supplier or system in question.

Fact:
Indeed.com’s Average Salary Index indicates a median salary of $82,739 for a job in mobility and wireless in the U.S.
Find your IT Career Path

IT is really about using technology to solve people’s problems.

Even if you don’t have necessary technical skills right now, you can learn them. In fact, more than most professions, IT involves a willingness to learn new things every day. Knowledge becomes obsolete pretty quickly in IT, but what you learn now can provide a frame of reference for what you learn next.

Myth:
You need a four-year IT college degree.

Reality:
Several pathways can help you get started in an IT career without a degree.

Non-profit and for-profit training organizations, high school computer classes and community colleges can prep you for an IT career. Check to make sure they incorporate curriculum aligned with industry certifications, so that the training best fits the up-to-date skills needed in the tech workforce.

CompTIA’s certification roadmap (www.comptia.org/roadmap) shows what types of jobs are available in IT and which IT skills and certifications are needed for each.

Inside this magazine, read the stories of those who have succeeded in IT. Then, take the first step on your own IT pathway.

Learn more about IT careers at CompTIA’s Skillsboost website, http://skillsboost.comptia.org.