

# Tech Jobs



# Tech: Fastest-Growing Field

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Tech jobs are truly the jobs of the future. According to the Bureau of Labor Statistics, employment of computer and information technology occupations is projected to grow 13% through 2026 — faster than the average for all occupations.

With more than 500,000 positions to be added over the next decade, these in-demand jobs — from software developers to computer programmers and network administrators — will benefit from the greater emphasis on cloud computing, the collection of storage and big data, and information security, according to the BLS.

The red-hot tech sector has created a wide-open market for IT job seekers as evidenced by four recruiting tactics noted by recruiting experts noted recently on the website The Enterprisers Project. These

include:

A shortened hiring process designed to attract talent in a field where top talent often field multiple offers.

Broadening or loosening of skills requirements, in which employers are less focused on finding the “perfect” candidate.

Offering flex schedules and remote work opportunities that recognize work-life balance that many in the field place premium value on.

A healthy corporate culture and improved perks that suggest an environment that supports social respon-

sibility and diversity, as well as extras that go beyond free lunches that have proven valuable in attracting and retaining the best employees.

The good news: Many of these positions can be had without a college degree and the median wage for computer and IT occupations was \$86,3320 in May 2018. Employers understand the right combination of experience, aptitude and willingness to learn on the job can eliminate the need for a degree or an advanced degree. And many, if not all, offer the opportunity to obtain industry-standard certification and educational opportunities.

The better news: New technology is developing at a rapid rate, which means the sector will create even more jobs to support these advancements.

The coastal tech hubs will absorb the majority of these jobs, but there’s been a boom in technology and

innovation across the U.S. — especially in the Midwest and South. USA Today recently identified the 15 cities driving hiring in the high-tech sector and noted jobs expanding in cities such as Denver; Ann Arbor, Michigan; Palm Bay, Florida (home to NASA’s Kennedy Space Center); and Durham-Chapel Hill, North Carolina. Other mid-size cities with an eye toward tech: Chattanooga, Tennessee; Kansas City, Missouri; and Columbus, Ohio.

While it has always been true that technology and automation make many jobs obsolete, it’s also true that new opportunities replace them — in the STEM fields — and offer more advancement, pay and opportunity.

So whether you’re a student deciding on a career path, contemplating a career change or seeking retraining to create new skills sets there’s never been a better time to look for new work than in the tech sector.

# In-Demand Tech, Systems Jobs

There's no escaping this fact: Technology and its support functions are the fastest-growing, highest-paying jobs in the U.S. That is not expected to change, unless it does so in terms of eclipsing present growth.

Because of this extraordinary growth, traditional companies are increasingly resembling tech companies as the line between technology and business blurs even more than in the past. As technology streamlines workflow, demand for tech professionals grows alongside that upward curve, in turn increasing demand. And if there's any flatness to the upswing in tech careers, it's because demand exceeds qualified candidates.

Among the jobs the tech industry is struggling to fill, according to a recent article in Forbes, are such positions as IT architect, security engineer, and other engineers and developers. Of course, these positions occupy the upper stratosphere of the field.

For more accessible, non-advanced degreed positions, tech jobs continue to hold top positions among the most in-demand occupations in the country. Here is a sampling of those jobs, their descriptions, new



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job openings and average salary, compiled by the website [tradeschools.net](http://tradeschools.net).

## HELP DESK TECHNICIAN

Specialists who field calls from computer users experience technical trouble. These technicians diagnose problems and suggest solutions or fixes, a job that requires a high level of expertise as well as advanced communications skills.

**New openings:** 72,100  
**Average salary:** \$55,050

## COMPUTER SYSTEMS ANALYST

These positions analyze a business's information systems and procedures and recommend technology designed to improve efficiency and effectiveness. These jobs play an increasing role in the high-demand workforce of the health care industry, as that industry transitions to electronic medical records and prescriptions.

**New openings:** 54,400  
**Average salary:** \$93,610

## SYSTEMS SOFTWARE DEVELOPER

The operating systems behind computers, phones and other devices are the backbone of the industry and play an increasing role in appliances and cars.

With the right mathematical analysis skills, those seeking jobs in this field will see long-range, competitive growth.

**New openings:** 47,100  
**Average salary:** \$114,000

## INFORMATION TECHNOLOGY MANAGER

IT pros plan, direct and provide support for an organization's computer-related functions. They tend to supervise those in other roles mentioned, such as computer systems analysts and support specialists. These roles are growing with the demand for better cybersecurity and the health care industry.

**New openings:** 44,200  
**Average salary:** \$152,860

# High-Tech Re-Education

If you're eyeing a position in the fast-growing field of technology, it's helpful to identify which field you'd like to apply your new-found skills.

For those returning to school to get the skills necessary to join the tech workforce, there is likely a tech aspect to almost every existing career so the choices are wide open. Here are some of the top fields in which tech workers can find great opportunity identified by the website ThoughtCo.

## **INFORMATION TECHNOLOGY AND COMPUTER SYSTEM**

Keeping abreast of the fast-moving changes and advancements in technology is the responsibility of computer systems designers and IT professionals. Community colleges are a great resource for training to attain certification and earning an associate's degree in these fields can pave the way for success.

## **AEROSPACE**

It goes without saying that every position in the tech sector requires the ability to adapt and understand rapid advancements. Nowhere is this more apparent than in the aerospace industry. But it's also an environment ripe for advancement from the ground



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up, beginning with apprenticeship and on-the-job-training, and advancing through positions in which the employer will sometimes pay for a college tuition.

## **HEALTH CARE**

The health care industry is experiencing an ongoing boom, with more than 2 million jobs already added in the past 10 years and is projected to produce another 2.4 million jobs in the next decade. The field is wide ranging, requiring a variety of levels of tech expertise that require vocational licenses, certificates and

degrees, depending upon the position sought.

## **CONSULTING SERVICES**

Almost 1 million new jobs have been created in the competitive and lucrative field of consulting services serving businesses, government and institutions. Working behind the scenes as independent contractors, tech consultants offer expertise, information, contacts and tools to improve processes and design tailored systems. These positions require a mix of technical knowledge gained through self-guided training and expe-

rience, independent certification and college courses. Individuals pursuing this path also need to develop the interpersonal skills necessary to engage with a diverse group of clients.

## **HOSPITALITY**

The entry bar for pursuing a tech career in the hospitality industry is easily accessible in this field in which the work and environment is varied, and the education necessary to attain a position can be had at the community college or vocational/technical school level. In the largely service-ori-

ented economy of the 21st century, job growth is huge and ever-expanding in this field.

## **RETAIL**

Like the hospitality industry, retail offers a wide variety of tech-oriented positions that work behind the scenes to develop, maintain and upgrade the systems necessary to keep large organizations running smoothly. Employers routinely seek and recruit IT pros coming from junior and community colleges, technical schools and university in this growing field that accommodates workers of all age and skill levels.

# Veterans Find Success in Tech

The vast scope and skills involved in running the world's most powerful military force speaks to what can be called the best-trained workforce anywhere.

The experience and training earned during military service prepares veterans for the opportunity to enter the civilian workforce with enviable preparation for the transition into the sophisticated tech sector.

Beyond mere training, the military offers valuable intangibles necessary to navigate the often complicated world of business and its intersection with technology. These qualities — work ethic, dedication to duty, commitment and leadership — are attractive to employers and give servicemembers a leg up in this competitive environment.

The sheer number of veterans returning from active duty in both war zones and those who serve in support of the military's vast worldwide operations requires a large network of transitional support. Aside from the assistance available from the VA, there are many nonprofit and an assortment of recruitment organizations who exist to aid veterans in making the leap from serving their country to serving the nation's technological ecosystem. Here are



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but a few veterans can access for support and opportunity.

## VET TEC

How do veterans get the hard skills to get into one of these coveted, high end tech jobs, asks the website CodePlatoon.org, which helps veterans and military spouses transition into the civilian workforce by providing technical training and career

placement. The VA's newly created Veteran Employment Through Technology Education Courses (VET TEC) program is a serious new resource. As long as the vet has even a single day of GI Bill benefits available, VET TEC is free to the veteran but doesn't use up their benefits, according to Code Platoon The incentive of debt-free tuition while working towards a

career in tech also provides a fallback in case a veteran changes their mind about the field.

## VETSINTECH

VetsinTech supports current and returning veterans with re-integration services by connecting veterans with a tech-specific networks, resources and programs for veterans interested in educa-

tion, entrepreneurship and employment in tech careers. Founded by Katherine Webster, who also founded TechCentralSF — an online directory and resource for high-tech firms in the Bay Area — VetsinTech is supported by such board members as Craig Newmark, founder of Craigslist, VetsinTech.org offers a variety of services for job seekers and employers including a job board, events and mentorship programs.

## VETS2TECH

This organization connects veterans with employment opportunities in manufacturing and technical careers nationwide, and educates employers on the tangible and intangible benefits of hiring veterans. The site offers a career center and advisors, as well as information for employers and veterans on negotiating a successful transition.

## GOOGLE

There are more than 2.5 million businesses in the U.S. that are majority-owned by veterans — 9% of all businesses in the country. According to a recent article in Forbes magazine, Google has enabled a new veteran-led attribute for businesses that are owned, led or founded by a veteran. Google's new tool helps veterans find jobs with a simple search query, as simple as "jobs for veterans" along with military job codes to display relevant job openings.



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# Take the Pulse of the Workplace

Once you've got the job in technology you've trained and strove to attain, actually going to work means more than applying your skills to the job at hand.

While that is priority one, adapting to the company culture plays a big role in how you'll fit in.

Despite the stereotypes, the culture at all tech companies is not the same. As the website Culture Amp, which focuses (appropriately enough) on corporate culture, there is no singular tech culture. There are similarities, but Google will not function like Apple, nor

will Microsoft operate like Amazon.

## THE BENEFITS

While it's true that tech companies often seek out employees willing to spend extraordinary amounts of time and effort toward its goals, tech workers also often enjoy extraordinary benefits.

What's not often pointed out is that new tech companies offer advanced workplace culture and take the lead among business organizations in these key areas Culture Amp highlighted:

- Open and honest two-way communication.

- Workplace flexibility.

- Perceptions of fair reward and recognition.

- Fair division of workload.

- Taking action on the results of employee surveys.

- Motivating people.

These are all important aspects of a culture that respects its employees and takes action to ensure that worker concerns are quickly and fairly addressed. Tech companies understand their employees are highly skilled and highly sought after, so it's a priority that these firms invest in creating a culture that responds to these issues to gain competitive advantage.

While it is again important to note that no two companies approach workplace culture exactly alike, as an employee you can expect a heightened level of connection between leadership, management and workforce. These companies understand that its employees lives matter and go to great lengths to provide continuing education and development that rewards and retains top talent.

## HOW TO FIT IN

It's important to understand how you'll fit into any workplace environment, regardless of whether it's a tech company or not. But the atmosphere in the tech world can also be remarkably different from many organizations.

Primarily you'll want to consider your own goals and the skills necessary to succeed in any given environment. The website The Muse advises you make a list of your top priorities and compare those alongside the positions you're applying for. For instance, you need to assess whether you want to advance quickly, are happy multitasking and how important learning and advancement opportunities are to you.

You'll also need to factor in how your skill set aligns with expectations. While some tech positions may seem alike and

often are described in similar ways, it's best to talk with a recruiter or mentor to determine any particular skills a company seeks, advises Kelly Hoey, author Build Your Dream Network. Some skills are expected, while others can be learned on the job.

Employers often place great value not only on tech skills, but on so-called "soft" skills, such as problem-solving, work ethic, communication, creative thinking and, of course, professionalism. In the broader sense, all companies seek well-rounded employees who exhibit a mix of people skills, analytical ability and base technical skills to adapt and perform.

It should be obvious from the start how a company treats its employees, especially in the competitive, forward-thinking world of technology.



# Not ‘Tech Literate?’ Think Again

Everyone knows someone who claims to be computer illiterate. But that self-designation pops up less often as technology has crept into almost every aspect of our lives, from laptops to tablets, smartphones to voice assistants.

It’s now hard to find anyone who gets along without the support of some sort of technology.

For those considering a career path, retraining or a transition into tech jobs, claiming you’re not a tech person is becoming irrelevant. The entry bar is surprisingly low and the training and skills more accessible and affordable than ever before at trade schools and community colleges.

The huge growth statistics and attractive salaries are drawing more people into the field who once identified as being a non-tech person.

What they soon figure out is that technology isn’t a total mystery and that many of the skills necessary to enter the field can be learned on the job. That latter feature is a cornerstone of the tech field, an industry that boasts of its collaborative approach to learning.

If you can think quickly, creatively and critically — skills that are required and valued in almost every business — the tech field is wide open. And while many positions require advanced degrees and a mix of aptitude, background and experience, just as many are open to

entry-level candidates.

Technology also rescues its workers from being lost in the company, becoming another cog in the machine or just a number, complaints many a worker has echoed from cubicles in almost every industry for the past century. Working in tech guarantees you’ll impact the lives of millions in the development of products and solutions in a relatively brief amount of time. Such revelations have an enormous effect on career satisfaction.

So what if you’re not a tech person or you (wrongly) feel the field is only

for millennials? The latter is only true to the extent that younger people grew up with much of the technology we now take for granted and are naturally attracted to jobs and careers in the sector, just as previous generations followed their parents into factories and offices.

Experience and skills can be gained, and tech companies are often just as focused on potential and raw talent. The only barriers are curiosity, a thirst for learning and hard work — and those hurdles can be surmounted by almost everyone, even the most non-tech among us.

# Tech Hiring Boom Unstoppable

There is almost no sector of the economy that is unaffected by technology.

The industry's broad-based impact has taken root in almost every community, business and industry in virtually every market across the country. And with that fast growth, technology brings high-paying jobs that are increasing at a rapid pace with slowing only when demand outpaces supply. This data from the U.S. Bureau of Labor Statistics and CyberStates.org, an organization that tracks tech employment, shows the outlook for future employment in the sector remains positive.

**11.8 MILLION**

Net tech employment in the U.S.

**261,000**

Number of new jobs added in tech in the past year.

**626,000**

Increase in tech jobs annually by 2026.

**1.2 MILLION**

Increase in tech jobs annually by 2026 factoring in retirement and career shifts.

**3.7 MILLION**

Number of postings for tech occupation job openings in 2018.

**1.5 MILLION**

Number of software and web



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developers — the largest and fastest-growing category of tech jobs.

**3.7 MILLION**

Number of postings for tech occupation job openings during 2018; with nearly 400,000 postings occurring in emerging tech areas.

**\$1.8 TRILLION**

The estimated direct economic output

of the tech industry, representing 10.2 percent of the national economy.

**2 TIMES**

The median tech occupation wage is nearly double the median national wage.

**525,000**

Number of tech business establishments in the U.S.; tech

startups/new business units launched in 2018 totaled 40,500.

**6TH**

Rank of tech in job creation since 2010 among the rankings of 22 top level occupation categories.

**38**

Number of states showing an increase in tech jobs in 2017.

**\$112,890**

Average annual pay in the IT sector.

**107**

Percentage above the average annual pay for all other types of employment.

**66/34**

Percentage of men and women, respectively, in the tech workforce.