

**MOTION
RECRUITMENT**

TECH SALARY GUIDE

2023



FOR EMPLOYERS AND CANDIDATES

UNITED STATES



The State of TECH EMPLOYMENT

Leaving a record year for the tech world behind as we move into 2023, salaries and compensation throughout the industry have seen ambitious growth as the workforce and marketplace continue to evolve.

Between the continued effects of the pandemic, concerns about inflation and a possible recession and the rising and falling of crypto, there has been a constant unease about what the future holds. Despite all this, the tech job market remains strong, with salaries on the rise and tech unemployment rates at near record lows - with some sectors reaching 0%.

Planning for future needs requires business acumen and an understanding of the market around you. Knowing the value of tech skillsets and teams will help set you up for success.



Matt Milano
President,
Motion Recruitment

Contents

The State of Tech Employment

- 03** Salaries, Demand and the Tech Job Market
The So-called Recession and its Impact in Tech
- 07** The Tech Talent Carousel: Supply
How Secure is Your Success in Uncertain Times
- 13** Hiring in 2023: Emerging Tech & Industries
- 17** 2023 Insights from the Experts
Continuing Trends from 2022
Trends & Advice to Succeed in 2023
- 23** IT Salary Data for 120+ Roles





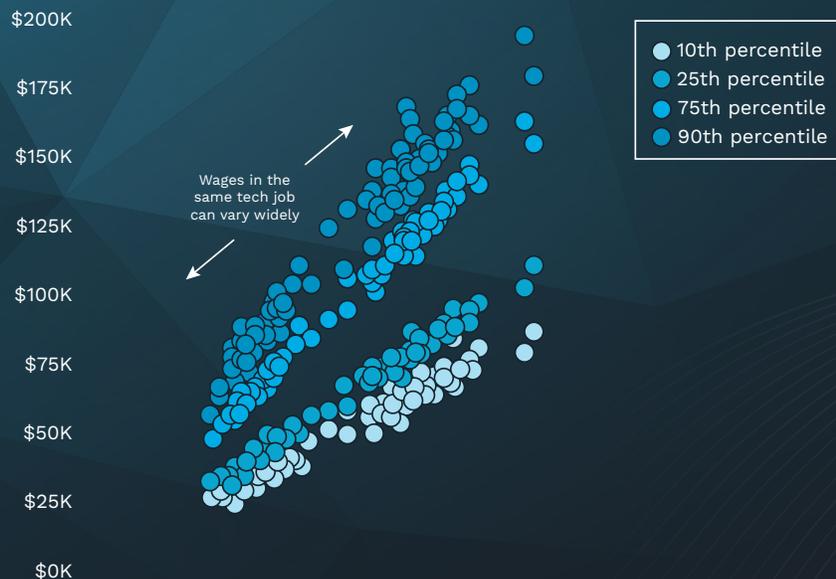
Salaries & Trends

As the number of jobs in technology continue to grow, how will demand shape salaries?

The tech industry remains a job candidate's market, with overall salaries increasing 6.7% in the first half of 2022, a higher jump than the year prior. Some occupations have seen up to a 30% increase year over year, while others have seen the typical consistent growth of 2-6% in 2022.

Tech Wages Can Vary Significantly Based on Occupation, Location, and Percentile

Wage percentile examples for Software Developers and IT Support Specialists



Source: CompTIA State of the Tech Workforce

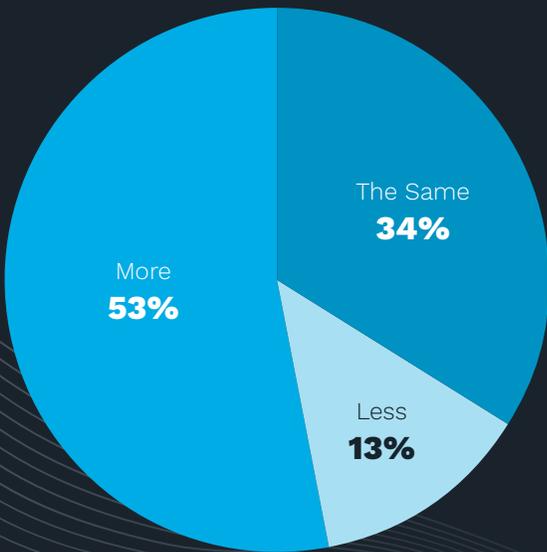
Despite recent statements from companies saying they will begin adjusting compensation depending on where remote workers live, the data is showing that in fact, candidates who received remote offers from competitive tech markets earned 5% to 10% more than the average salary of those heading into the office.

Continuing the trend from 2021, the continued acceptance of remote work has led to an increase in tech workers in cities that are not normally considered tech hubs. Cities like Austin, TX, Raleigh, NC, and Denver, CO, are now considered some of the top places for tech workers. While tech mainstays like Silicon Valley and New York City continue to be great places for tech workers to ply their craft (with NYC having the highest quantity of IT jobs available), they are no longer the end-all-be-all when it comes to tech jobs in the US.

Remote or not, companies are setting aside more budget for hiring developers, signaling the continuing demand and resilience when it comes to tech talent supply needs.

200,000 IT jobs go unfilled on average, due to a lack of qualified candidates.

2022 Budget for Recruiting Developers Compared to Last Year



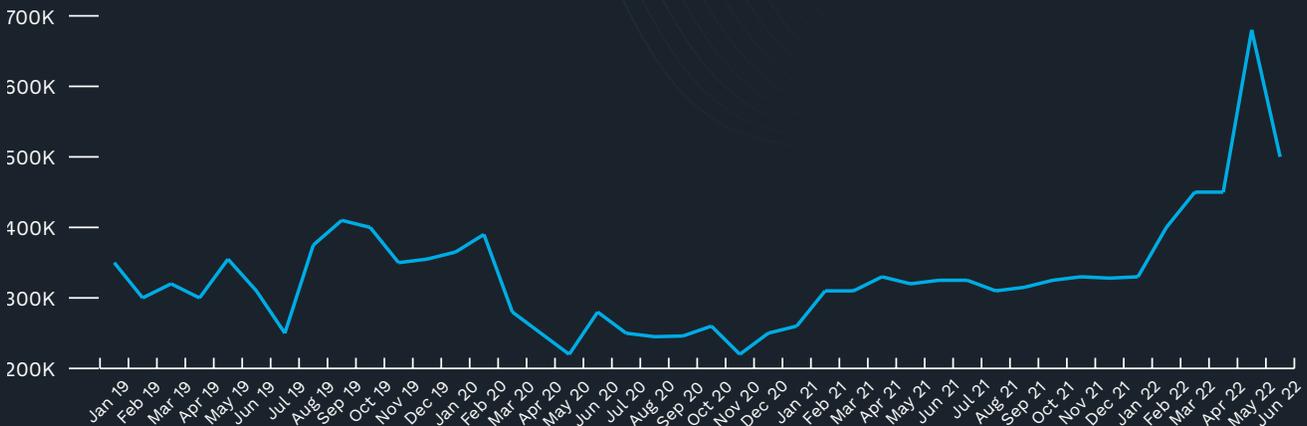
Source: CodinGame & CoderPad Tech Hiring Survey 2022

Not only are tech workers getting paid more, but there are more tech positions overall. Through the first half of 2022, tech employers hired 106k workers, a 69% increase year-over-year, and over 95% of the top 50 tech employers increased their hiring in the first half of 2022. There has been a small decrease in tech hiring since the peak month of May 2022, but the technology industry remains one of the strongest in the US, and the amount of unfilled tech positions continues to grow.

While tech employment is projected to increase by 178,000 workers in 2022, the fact of the matter is that in the first seven months of 2022, there have been 3.1 million job postings for tech positions, a staggering 49% increase from 2021. Many of these roles are going unfilled due to a lack of qualified workers. When it comes to technology needs in the workplace, 97% of IT leaders agreed that while their teams are working more closely with HR leaders, it will take longer than expected for digital transformation because staff shortages are so abundant in the tech industry.

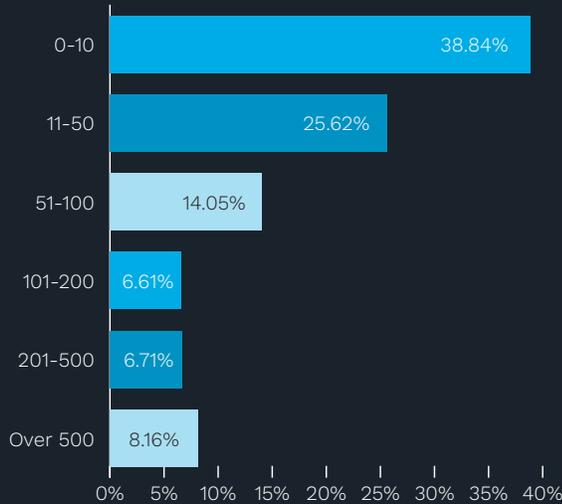
Monthly U.S. Tech Job Postings

January 2019 - June 2022



Source: U.S. Bureau of Labor Statistics

In 2022, how many developers does your company plan to recruit?



Source: CodinGame & CoderPad Tech Hiring Survey 2022

More than a quarter of employers are planning to hire up to 50 technical roles this year, and 35% are looking for more than 50 developers to add to their team. On the flip side of the supply equation, the number of developers increased by only 2.5% in 2022, short of the predicted 4%.

So while the tech economy might be at an inflection point, what real impact is the economic news having on the IT job market?

READ MORE: Why tech talent demand spiked after 2021's growth spurt



Are the Fears of a Recession Hitting Tech Just Inflated with Hot Air?

From the fall of 2020 to the spring of 2022, the tech industry was hiring at a pace not seen since the dotcom bubble of the 1990s. The necessary rush for companies to undergo a digital transformation led to a large influx of hires to meet the demand of the exponential growth in users/sales. Amazon, Shopify, and Tesla all doubled their employee headcount between January 2020 and December 2021.

As the calendar turned to 2022, an unrealistic expectation of productivity and returns started to make the market untenable, while at the same time, the US has continued to experience supply chain woes and inflation rates not seen since the 1970s.

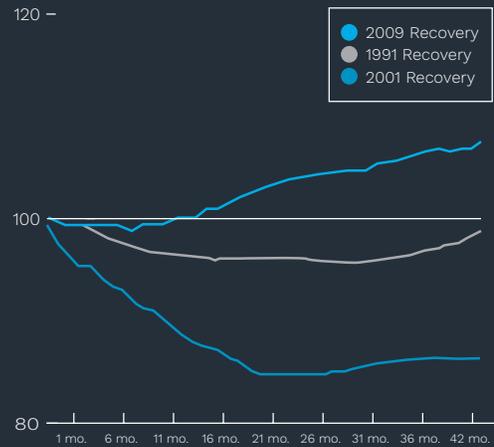
Numerous tech companies in the spring and summer announced hiring slowdowns or layoffs, with the crypto space hit especially hard as Bitcoin lost 60% of its value, leading to Coinbase letting go of 18% of their staff.

However, despite the high-profile announcements of layoffs throughout 2022, the tech unemployment rate remains lower than pre-pandemic levels. In addition, throughout the summer of 2022, job numbers all across the US economy remained high, with over 500,000 new jobs created in July. After the hyper-speed of the past year, growth is now continuing at a more sustainable pace.

Change in Technology Workforce Employment Economic Recoveries Index

Reports show that the tech industry has grown more resilient with every related bubble burst, requiring less recovery time after economic crisis.

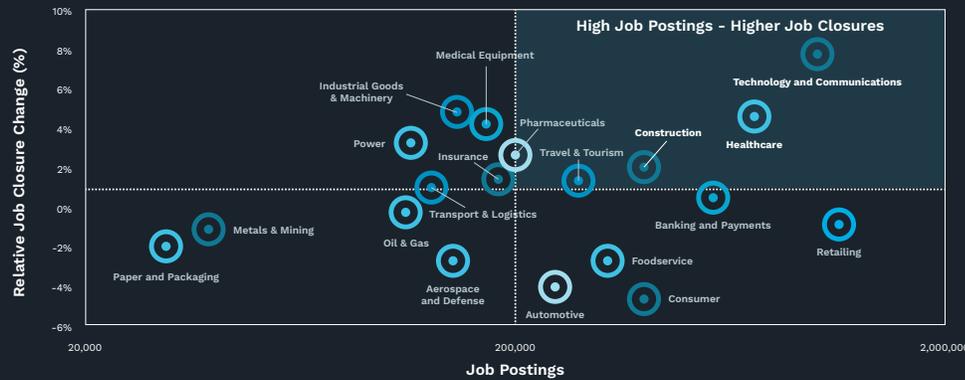
Source: U.S. Bureau of Labor Statistics: Combined workforces of Computer systems design and related services (Professional and Business Services), Computer and electronic products (Durable Goods) and Data processing, hosting and related services (Information) indexed to the month the NBER noted the recession ended March 1991, November 2001, and June 2009 respectively.



In fact, employment in 2022 across the tech industry for both technical and non-technical roles is up by 92% compared to 2019, with an increase of 175,000 jobs, despite layoffs – showing the quick absorption of talent back into the market. While the tech and communications industries might have appeared to have job closures, in truth, as an industry, high job postings and demand continued at just as steady of a pace.

Sector Map: Active Jobs, Q2 2022

Source: GlobalData Job Analytics Database



Depending on where you look, there are warning signs of further economic downturns or appearances of a stabilization. The tech economy might be at an inflection point, but with all this continued job growth, is it enough to narrow the tech talent gap that companies have been struggling to fill?



The Tech Talent Carousel: Supply

The Tech Talent Demand and Supply Wheel

With so much movement and uncertainty in the tech job market, there remains a widening division between companies in the tech world. Tech giants and appealing startups are able to keep up with hiring while those in the middle need to be more inventive in who they hire and what they offer, or they may be unable to hire the people they need.

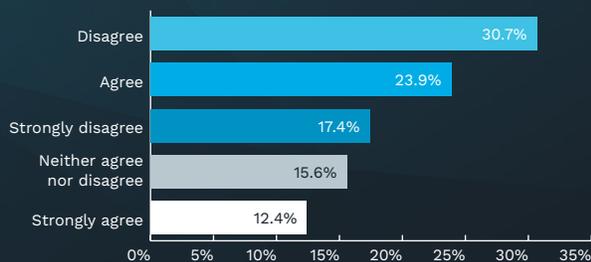
Even when talking about the layoffs mentioned earlier, the majority of job decreases at tech companies were not those held by tech workers.

The gap between the haves and have-nots inside the tech world continues to grow in 2022. Among companies that tried and failed to fill tech roles in 2021, then continued to search in 2022, only 20% have been successful in their search – leading to HR and hiring managers alike compromising on talent quality.

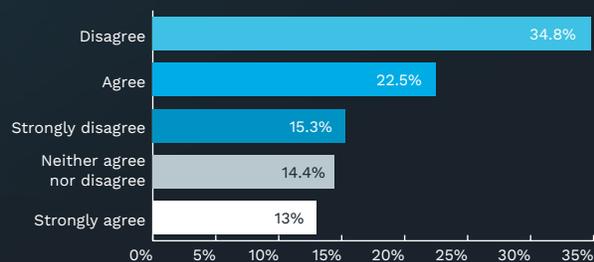
76% of IT and Technology employers report difficulty finding the skills required for their open roles

Hiring Leaders: Willing to compromise on candidate quality to fill an opening quickly?

HR



Engineering



Source: *hackerearch State of Developer Recruitment*

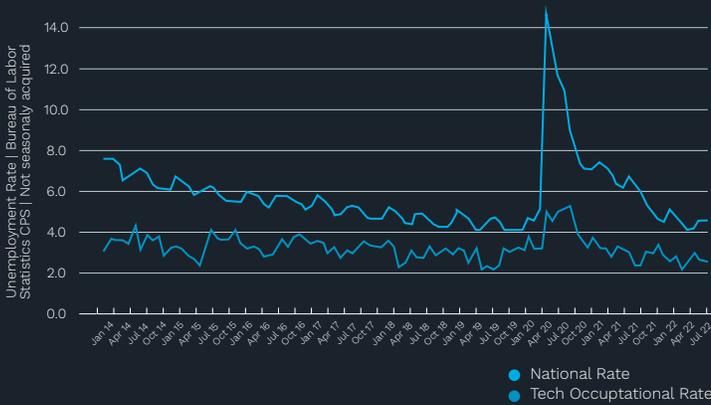
Even through times of economic uncertainty, companies realize the necessity of hiring tech talent. An example of this phenomenon was in the spring and early summer of 2022, when the first fears of a recession led to a brief uptick in unemployment inside the tech world, raising from 1.4% in March to 2.1% in May.

GET ADVICE FROM THE EXPERTS:

What can companies do to compete for top tech talent?



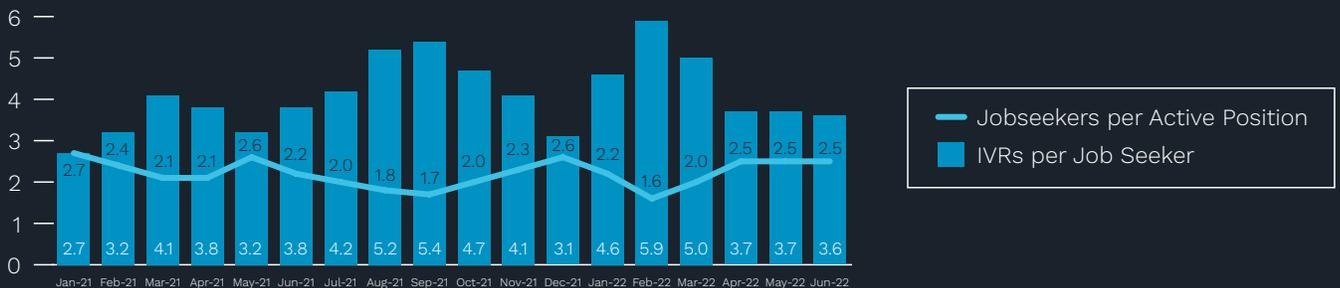
Unemployment Rate Trending



However, not only was this still far below the national average of 3.6%, but just two months later the rates dropped back down to 1.7%, with many workers quickly finding new positions at similar or higher salaries than before.

With such high demand and low supply, especially when only 70% of technical offers are accepted by candidates, companies are struggling to get talent not only to interview with them, but to start a job, as seen how many interview requests every job seeker is receiving.

Interview Requests per Jobseeker vs. Jobseekers per Active Position



IT Professionals: When in Uncertain Times

With so many open roles, tech workers across North America are continuing to move to new positions and companies, with 72% of tech workers saying they have considered changing jobs, and 52% considering leaving their job at least once per month. With the number one reason to move to a new position being an ability to make more money, combined with the very real examples of some individuals seeing over 25% increases (or higher) in salaries when changing companies, it's clear why so many technologists continue to be on the move.

Why Technologists are Moving On From Their Current Jobs



Source: Pluralsight State of Upskilling 2022. Note: Responders could select more than one answer.

A related aspect of the steady supply of tech workers heading to new opportunities is the normalizing of remote work. A big reason for this is that in a literal sense, it is simply easier to interview for job opportunities in a remote world. With a virtual interview process, it is easier for candidates to pursue new opportunities without having to take PTO or raise suspicion with their current manager.



About 90% of tech candidates say they would either start looking for a new job when they are denied a raise, or try to negotiate other benefits, with half of employees expecting salary increases by 2023.

Source: Hired's State of Tech Salaries, September 2022

Regardless of any economic red flags and normalization of the job market, expectations from tech workers remain high as more than half believe that candidates hold more power; emboldened by wanting a better fit and higher-paying salaries, candidates are still willing to job search – though practical benefits have replaced stock and equity when it comes to what candidates would trade in a higher salary for – unlike 2021 when stock and equity was the only one job seekers said they would consider.

What perks would you trade a higher salary/offer for in 2022

Flexible work schedule	11.6
Physical health, dental and vision insurance/benefits	10.1
Paid time off	9.7
Retirement plan benefits (e.g., 401k matching)	9.3

Source: Hired's State of Tech Salaries, September 2022

Whether you want to call it The Great Resignation, The Great Reshuffling, or something else, in the tech industry in 2022 and beyond, if you have the skills and want a job, finding one is easier compared to other industries in the United States.



How Secure is Your Success in Uncertain Times?

For job seekers in the IT world, among the consistent demand for tech workers, companies are now looking to focus on their core competencies and avoid adding to headcounts that only create bloat and have minimal impact on revenue. Skills-based hiring has become a way to diversify and assure teams are hiring for the right skillsets, especially since almost half of hiring managers believe finding qualified candidates is their biggest challenge.



What are your main challenges when recruiting developers?

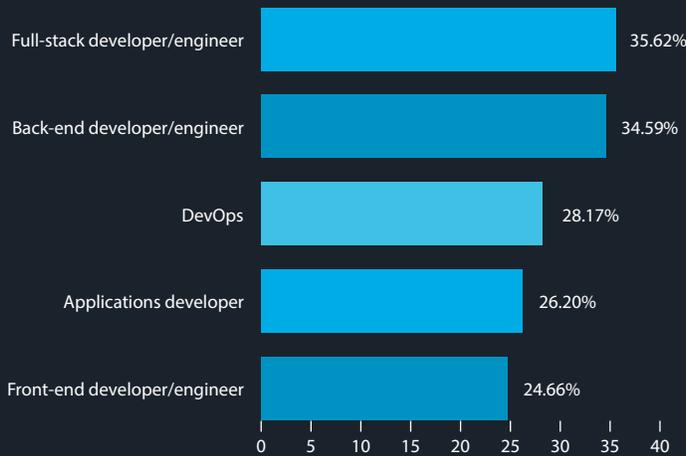


Source: CodinGame & CoderPad Tech Hiring Survey 2022

When it comes to the work that is the basis for many tech companies, there is still a tech talent shortage at all levels. In fact, the ratio of tech job postings to closures is better than in any other US industry. Additionally, a recent NACE study revealed that 100% of companies surveyed will be hiring in 2023, with 89% saying they will be hiring both interns and full-time employees.

There are departments that have more growth potential than others, however. While certain tech sectors have somewhat plateaued when it comes to growth and salary gains, others are primed for further surges in the future. The US Bureau of Labor Statistics is predicting the need for software engineers will increase by 22% by 2030. This is in line with a recent survey of recruiters asking which positions will be the biggest challenge to hire. Full Stack and Back End Developers/Engineers topped the list, with Front-End Developers/Engineers also in the top 5.

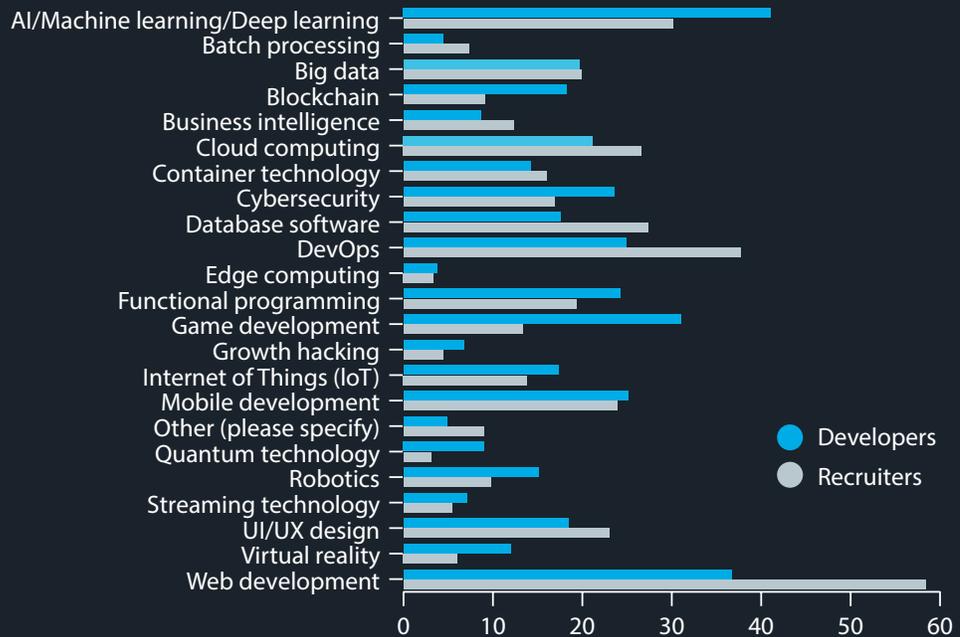
Top 5 positions recruiters will struggle to hire for 2022



Source: CodinGame IT Hiring Trends 2022

While the optimism at the start of 2022 has waned as the year progressed, businesses should still look for growth opportunities, but be smarter with their processes. Throughout the industry, hiring managers and company leaders are saying that the demand for experienced tech workers is still at an all-time high.

Which skills would you like to acquire/hire for in 2022?



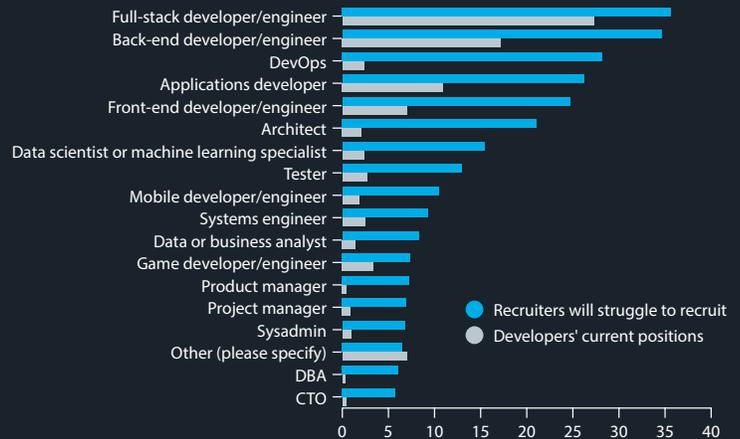
Source: CodinGame & CoderPad Tech Hiring Survey 2022



Not only are IT professionals aware of some of the highest market demands, many want to upskill in areas that are facing extreme demand and lack of supply when it comes to talent.

Businesses who relied heavily on contract work during the pandemic should prepare for a shortage of inherited knowledge inside the company, especially as the Great Resignation trend continues through the end of 2022. While contracting should be an important strategy within a company’s talent pipeline, having and keeping experienced workers who have been instrumental in building and growing key parts of a business should be retained, if possible.

Developers' current positions vs. positions recruiters will struggle to hire for



60 Days
The average time to hire for a technical role in 2022 is 60 days on average.

When reviewing the big picture, tech employers should focus on attempting to future-proof a business. 42% of companies need to update their legacy tech stack according to a recent survey. Additionally, before the hiring process begins, hiring managers should go into detail on the skills that are going to be needed for the position.

While interviewing hiring managers across North America, some say they’ve been conducting 15, 20, and even up to 29 first-round interviews trying to find the right candidate to join their team. By narrowing down to the absolutely necessary skills that are required for the job, the initial search for talent will become easier.



How is Contracting a Hiring Solution and Opportunity for Tech Talent



Hiring in 2023: Emerging Tech & Industries

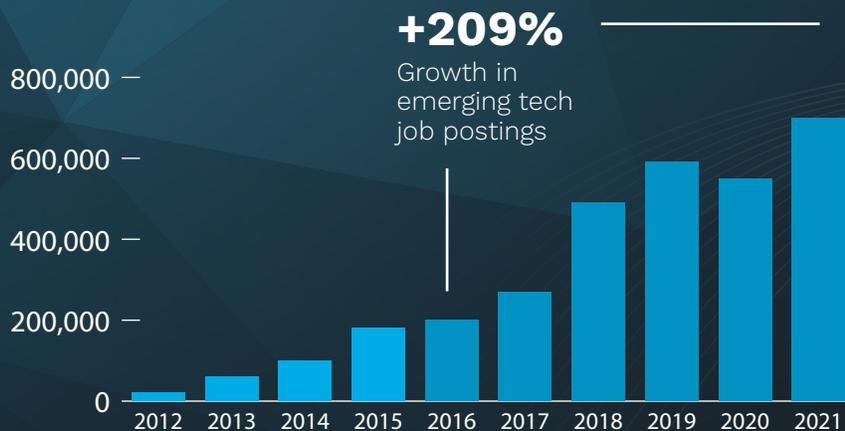
2023 Hiring Priorities: Industries to Watch

The future technology that was predicted in science fiction books decades ago is coming closer than ever to fruition. Self-driving cars, the metaverse, AI and machine learning, and others are growing both in investments and popularity. With the majority of tech leaders saying they have or plan to increase emerging technology investments, these are the tech sectors that workers may want to keep an eye on or look to expand their skillset to.



Emerging Tech Demand Ramps Up

Annual emerging tech job postings by U.S. employers.



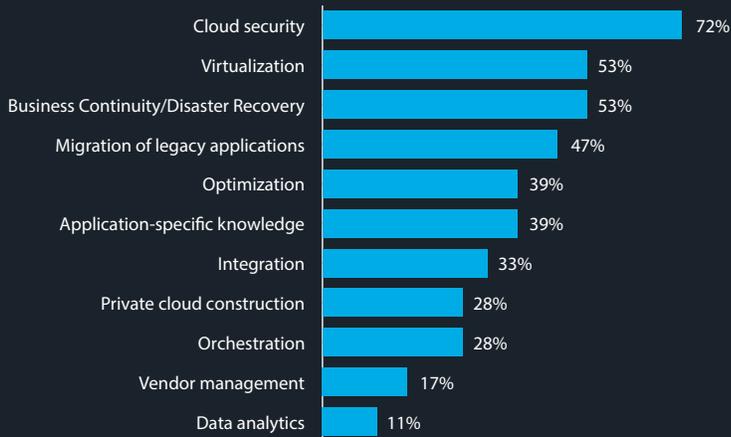
Source: EMSI Burning Glass | U.S. Bureau of Labor Statistics | CompTIA

Companies Are Keeping Their Heads in the Cloud:



The tech world (and the world as a whole for that matter) continues to deal with the aftershocks of COVID-19, and with that comes a shift in the hiring priorities for companies across the United States. Cloud computing continues to be a new major focus in hiring, as remote work has been solidified as a major part of the new business environment. It is projected that worldwide end-user spending on public cloud services will reach nearly \$600 billion in 2023.

Cloud Skill Needs



Source: CompTIA

With this sudden increase in spending, there are companies that are new to the cloud space that might not be spending their money as efficiently as possible. With a survey saying that as much as 32% of cloud spending is going to waste, ideally, businesses can build out FinOps (Financial and Operations) teams to ensure that cloud decisions are data-driven to keep costs down.

Additionally, it is projected that enterprise IT spending on public cloud computing will overtake spending on traditional IT by 2025. Companies like Walmart have shared plans to hire 5,000 tech workers as they expand investments in cloud and cybersecurity (among other specialties mentioned below). While this will help make information easier to communicate between interested parties, it also adds points of failure and security concerns. This is only one of the many places where cybersecurity is becoming the most in-demand skill for both companies to hire for and tech workers to upskill in.

AT A GLANCE: #1 Most Scarce Skill in the US

The need for cybersecurity goes beyond companies in the typical tech spaces. Places of higher education and those in the healthcare sector are continuing to grow their hiring for cybersecurity roles, as data protection becomes a major source of liability. Even for those that have minimal tech usage, having someone in a cybersecurity role is needed to create awareness in a business and protect against basic phishing threats.



27%

of organizations had a security incident in their public cloud infrastructure in past 12 months.



770K

jobs for cybersecurity skills posted in 12 months prior to October 2022.



2.4x

expanding demand for cybersecurity workers than overall US rate.

Machine Learning and AI Take Giant Leaps Forward

On the opposite end of the spectrum of email phishing scams, the growth of Machine Learning, Quantum Computing, and AI has been a major driver in the increase in computing power. Thanks to these skill sets, the standard made by Moore's Law where computing power doubles every two years has now been lapped, with exponential growth and computing power now being doubled every three to four months.

The growth of this sector of the industry has made improvements in a variety of places, including cybersecurity, with some examples being AI software combing through network traffic to spot malicious activity, and helping detect and evade ransomware attacks at a far better rate than manual surveillance.

Relatedly, using machine learning to better analyze big data is helping grow a variety of fields, from advertising, chatbots, fraud protection, and UX systems like improved personalized recommendations on entertainment sites and apps. With 89.7% of big data being generated over the past two years, those that can harness the power of all this information are becoming valuable to companies across the economy.

With all these use cases, it's clear why businesses are investing in workers with machine learning and AI skills. A decade ago, Data Scientists were being called, "The Sexiest Job of the 21st Century." Whether that designation still stands is up for debate, but companies are still spending major dollars to bring in people with machine learning and data analysis experience.



Out of the 10 roles that will be most in demand by 2025, data-related roles make up the majority of the need.

Source: World Economic Forum



To The Moon: The Growth and Volatility of Crypto and Blockchain

When it comes to growth and unpredictability in the tech space, nothing defined those two words more than the blockchain/cryptocurrency space over the past 12 months. While coins like Bitcoin reached a peak worth of nearly 70k and valleys of under 20k, this is only one factor contributing to this sector's volatility. How companies view the useability of the underlying technology of blockchain and web3 will decide the long-term career growth of those in blockchain.

When it comes to places like crypto exchanges, there have been layoffs of up to 18% of a company's workforce. However, Coinbase and others have stated that these layoffs were not tech workers, but other facets of the business. Companies across tech continue to pour money into the blockchain space, with over \$30 billion being added in the first half of 2022, outpacing last year.

The use cases for blockchain technology for businesses that aren't in the crypto space are places where those with the needed skills can find more stable opportunities. Major companies like Microsoft, IBM, Kodak, Walmart, and InBev are using blockchain technology in a variety of ways that goes beyond buying and selling coins and NFTs into data security, financial transactions and supply chain transparency.

Job Landscape

By 2025, new jobs will emerge and others will be displaced by a shift in the division of labor between humans and machines, affecting:



Growing job demand:

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. Big Data Specialists
4. Digital Marketing and Strategy Specialists
5. Process Automation Specialists
6. Business Development Professionals
7. Digital Transformation Specialists
8. Information Security Analysts
9. Software and Applications Developers
10. Internet of Things Specialists

Decreasing job demand:

1. Data Entry Clerks
2. Administrative and Executive Secretaries
3. Accounting, Bookkeeping and Payroll Clerks
4. Accountants and Auditors
5. Assembly and Factory Workers
6. Business Services and Administration Managers
7. Client Information and Customer Service Workers
8. General and Operations Managers
9. Mechanics and Machinery Repairers
10. Material-Recording and Stock-Keeping Clerks

Within the last decade, everything from business productivity softwares and AirBNB's, to gene editing, robotics, big data, and NFT's have exploded in growth. The future of technology does not appear to be slowing down and only looks to be increasing – and increasing tech jobs with it.





Continuing Trends from 2022

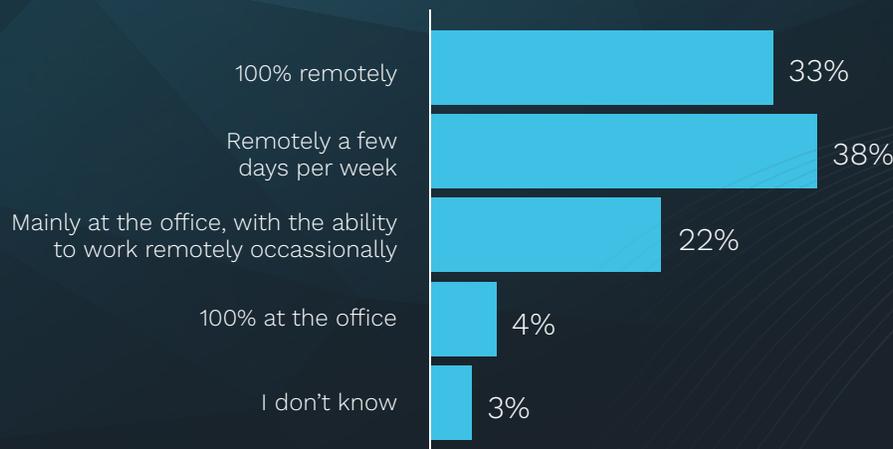
While there have been some interesting shifts over the past year, many of the most defining movements within tech industry have remained stable for both tech workers and businesses.

Work From Home is Here to Stay:

Despite the fact that only 5.5% of businesses reduced office space during the pandemic, more and more workers are looking for remote or at the very least hybrid roles when on the job search. This is in conflict with many managers and business owners who are looking to get people back in the office on a more regular basis.



Developers' Preferences for Work Situation



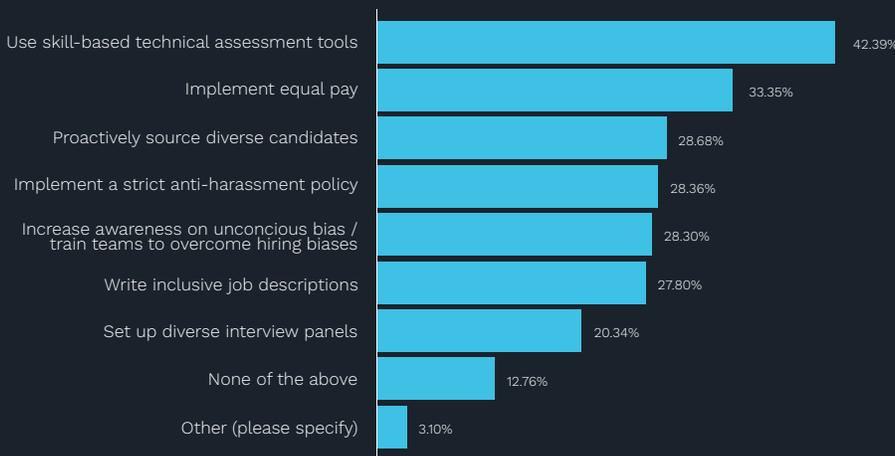
Source: CodinGame & CoderPad Tech Hiring Survey 2022

However, the preference from workers is clear, with 60% of employed adults saying they would be more likely to apply for a job with a remote work option, and 40% saying that they would rather quit than return to the office full-time. While shifts in the economy may lead to owners getting more people back to the office, an inverse effect could also be businesses finally letting go of costly office space to cut costs.

DE&I Efforts Grow in Importance:

For the tech community, being a part of a company that invests in DE&I initiatives is something which many place high importance on. Not only that, but an increasing number of both companies and individuals within the tech world are looking to take an active part in these programs, joining or adopting programs like Employee Resource Groups or affinity groups, which 33% of companies have seen growth in over the past year.

What does your company do to improve diversity in its tech recruitment?

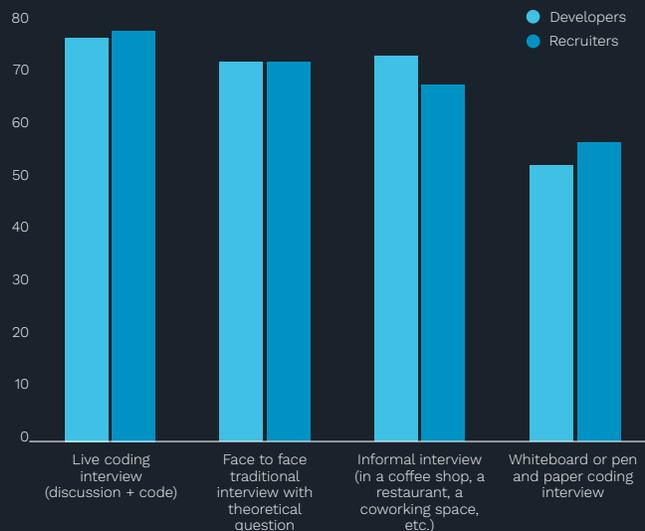


Individuals within these groups also want to ensure that their voices are heard, with 80% of employees believing that company leaders should take actions to address DEI issues, with 47% saying they are not seeing those in management positions take the necessary steps.

Condensed Hiring Processes:

Over 90% of tech hiring leaders and engineering leaders said that improving their company’s software engineering hiring process is important. Having a quick, efficient system to interview and make a decision on who to hire remains a powerful way to stand apart in the tech world. Putting undue labor on applicants with things like tech tests can turn off candidates who might have been a great fit for a role.

What is your preferred interview format?





Trends and Advice from the Experts to take into 2023

For Both Tech Leaders and Professionals

- **The Tech World Still Stands Strong:** With all the talk of layoffs and recessions, the pure statistics are saying that this is still one of the best times to be a part of tech. While we are no longer hitting the absolute peaks of 2021, the facts are that unemployment in tech is actually better than before the start of the pandemic, salaries continue to climb, and opportunities are available across the industry.

While it might be time to become slightly more risk-averse, both job seekers and companies shouldn't miss out on opportunities to grow.

For Tech Professionals and Job Seekers

- **Salaries Normalizing:** Candidates looking for a new role and expecting the stratospheric numbers that were happening in 2021 will more than likely be disappointed, as companies are leveling off salaries across the board, especially in senior-level roles. As always, the truly elite candidates will continue to be in high demand and be compensated accordingly, but businesses are largely no longer trying to outdo their competitors.
- **Nationalizing Compensation:** However, the continued acceptance of remote roles has forced companies to compete nationally and offer salaries to match. Companies based in major tech hubs (that also have a high cost of living) like San Francisco and New York City are offering similar salaries no matter where a candidate is living, so it's possible to obtain a New York salary while living in Topeka.
- **Knowledge is Power:** Depending on circumstances, it might still be the right time to find a new opportunity in the tech world, but with venture capital spending becoming more discerning, it is more important than ever to do due diligence when looking at a potential new place to work, especially if considering working for a startup.

Test Your Business IQ: Look at a company's business plan; have they reached profitability and is their success sustainable? If looking at a role in a startup, look at when they've gotten their funding and how they've done since then. If there are red flags, even a high salary might not be worth the risk. Having a higher market and business IQ will help you in your job search and find the right role at a thriving company.



APPLY NOW: Find a Contract Job for Your Next Career Step

•••• **Junior Level Workers Consider Contracting:** If companies are cutting back, many times less efficient talent in junior-level roles are more likely to be let go or never hired in the first place. However, while companies may not want to take the risk of bringing on those with little experience full-time, those candidates are still being hired with quality compensation on a contract basis.

For those looking to get their foot in the door inside some of the bigger companies in tech, contracting is a great way to get experience and begin your career. Many of these businesses also look for contract-to-hire roles, where those who prove their worth are offered full-time positions. With the ability to truly get paid for every minute you work and benefits provided by the recruiting company you work with, contracting is a viable way to make an impact in tech, and on your bank account.

For Companies

•••• **Embrace Hybrid:** As work-from-home becomes more entrenched in the tech world, an interesting trend is emerging where some tech workers do want to spend time working in an office. While in-office every day is a non-starter for many in the tech community, a hybrid approach is an optimal way to balance the need for in-person interaction with the freedom that remote work provides. It could be once a week, once a month or as needed.

Instead of searching for talent exclusively in the city you do business, expand to “a 100-mile bubble” where employees are asked to come to the office once or twice a month without the need to fly them out. This allows for workshoping and whiteboarding, team building and culture building in a less complicated and expensive way than a nationwide team.

- Phillip Perkins | Vice President, Motion Recruitment



Non-Financial Benefits



READ MORE: How to Find Success in The Hybrid Workplace



Source: Data compiled from job postings on AngelList, February 2022
Percentage, among Series A startups that mentioned perks and benefits in the job description

- **Show, Don't Tell Culture:** With such job fluidity for top talent, businesses need to “show” how they value employees. For companies wanting workers to come back to the office, that means demonstrating why having employees under one roof is important for both sides of the equation. Tech companies need to show that promoting a workplace culture isn't just a bunch of buzzwords, but with tangible actions behind them. Curious about what's been working for other tech employers, according to our candidates?

Create events for workers that go beyond the basic icebreakers and team building. If surveying workers about how to improve the company, put some suggestions into effect. Offer ways for workers to grow their careers and streamline the onboarding and start-up process. These are all ways to make a big impact on what an employee thinks about the business they work for.

•••• **Work-life balance trumps even bank balance for job seekers**

Percentage of professionals selecting these as top priorities when picking a new job:



Source: LinkedIn Global Talent Survey, October 2022

Finally, many technologists we've talked to say they are looking to work for a place that is socially conscious and puts an effort into the causes they care about. Whether it is a philanthropic goal that is a core part of a business plan, donations to causes that are important to company leaders and/or employees, or just extra PTO for volunteering, having programs in place that show that a company is focused on more than turning a profit is something that top tech workers are seeking in the market today. Hint: It helps if your product or service makes a difference and can be used to “do good” to begin with.

- **Knowledge is Power:** In addition to truly understanding the IT employment market, companies hiring in the tech space need to understand precisely what skills they are looking for in a role, clearly lay out the responsibilities in the job description, and know the salary it will take to get the type of experience needed to successfully complete the job. What's the competition paying? What can you offer?

Having an effective training program is not only something that tech workers are looking for, but it also gives companies the opportunity to hire less senior level (and less expensive) employees and build their skills in-house. With robust training materials, new hires can delve into and solve their organization's complex problems faster and more efficiently.



Move your 2023 Forward **Services & Opportunities**

While 2022 has been called a “return to normalcy,” normal doesn’t mean boring. New and exciting opportunities for the tech community pop up almost daily, with businesses across the industry thriving and looking to add to their ranks. It still is an exciting time to be in tech, with both businesses and job seekers better at figuring out what is important to them. With the landscape constantly changing, it’s important for everyone to have experts on their side to help guide them on their journey to success.

Motion Recruitment stays on the pulse of the tech world, seeing the innovative ways businesses and workers are staying a step ahead of their ever-growing competition, and can help guide you into making the right decisions for your business or career in 2023 and beyond.

We hope that these insights and the following salary data helps you better understand today’s technology market, and we are always ready to hear your feedback, talk strategy, and advise your roadmap to success this year. Visit our website to contact a local expert and get started today.



VIEW TOP TECH JOBS HERE



TALK TO A LOCAL HIRING EXPERT





••••• Tech SALARY Ranges

This section includes city specific variances that can be applied to find regional wages and 120+ North American salaries per tech job.

PAGES 23-31



Contents

Tech Salary Ranges

- 24 Local Variances for Top Tech Hubs
- 25 Management and Executive
- 26 Software Development
- 28 Product + UX
- 28 QA, Mobile
- 28 Functional
- 29 Data
- 30 Infrastructure
- 30 Agile
- 31 Cyber, Security



Local Variances

With more and more tech positions becoming fully remote, cities that can be considered tech hubs have rapidly expanded. **See how remote and hybrid offices have affected the tech marketplace [here](#).**

Variances

	Arlington	Atlanta	Boston	Charlotte	Chicago	Dallas	Irvine	Los Angeles	New York	Philadelphia	Phoenix	San Francisco	San Jose	Toronto
Software	1.018	0.901	1.004	0.831	0.937	0.931	1.061	1.098	1.046	0.870	0.921	1.245	1.242	0.942
Security	1.063	0.940	1.047	0.867	0.978	0.971	1.107	1.146	1.092	0.908	0.961	1.299	1.296	0.983
Product & UX	0.950	0.840	0.936	0.775	0.874	0.868	0.989	1.024	0.976	0.812	0.859	1.161	1.158	0.878
Mobile	1.173	1.038	1.156	0.957	1.079	1.072	1.221	1.265	1.205	1.002	1.060	1.433	1.430	1.084
Infrastructure	0.898	0.795	0.885	0.733	0.826	0.821	0.935	0.968	0.922	0.767	0.812	1.097	1.095	0.830
Functional	0.975	0.863	0.961	0.796	0.898	0.892	1.016	1.052	1.002	0.834	0.882	1.192	1.190	0.902
Data	1.036	0.916	1.021	0.845	0.953	0.947	1.079	1.117	1.064	0.885	0.936	1.266	1.263	0.958
AVERAGES	1.016	0.899	1.001	0.829	0.935	0.929	1.058	1.096	1.044	0.868	0.919	1.242	1.239	0.940

Senior Data Scientist

Low Range: \$142,040

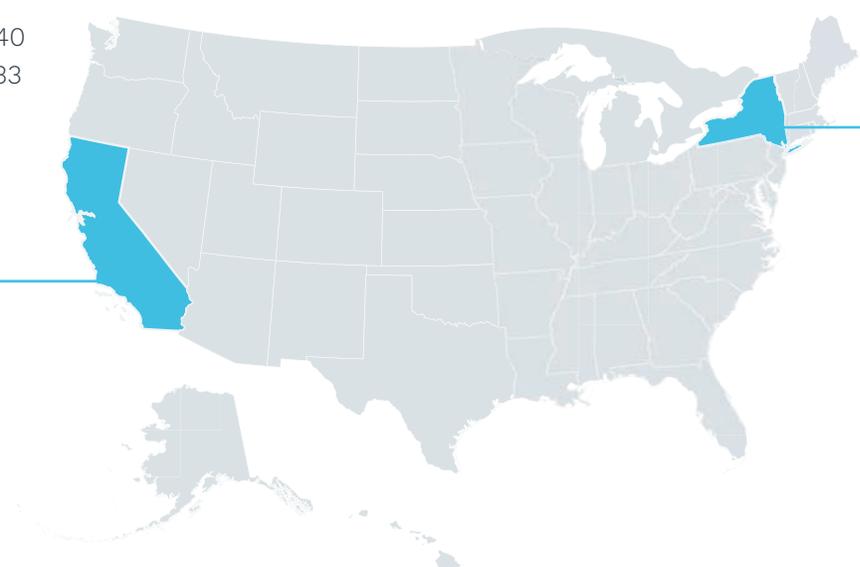
High Range: \$181,933

Average: \$161,987

SAN FRANCISCO

AVERAGE X 1.265

\$205,075



NEW YORK

AVERAGE X 1.173

\$190,010

***The city variances shown here are derived fully from analyzing internal company data, which is copyrighted and intended for personal use only.





NATIONAL Management/Executive

As described on the opening page, salary averages here represent low ranges and high ranges of the two levels.

Management	MIN	MAX
Chief Security Officer	\$215,901	\$323,852
VP of Engineering	\$198,629	\$246,127
Chief Technology Officer	\$180,277	\$226,696
Creative Director	\$161,926	\$237,491
Director of Engineering	\$169,482	\$211,583
Engineering Manager	\$156,528	\$192,152



Top priorities when considering a new company (US)

October 2022, LinkedIn Global Talent Survey

1. Compensation and benefits
2. Work-life balance
3. Flexible work arrangements



Values growing more important for candidates

October 2022, LinkedIn Global Talent Survey

1. Upskilling: learning new, highly desired skills
2. Impact: Challenging and impactful work
3. Advancement: opportunity for internal mobility increases employee retention by **12-19%**.



#10 MOST FREQUENTLY POSTED TECH JOB (INDEED)

SENIOR TECHNICAL DIRECTOR

Average Salary:
\$196,397

*One of many job titles for a role similar to Director of Engineering, though "Senior" pushes the salary up to the top of the bracket.



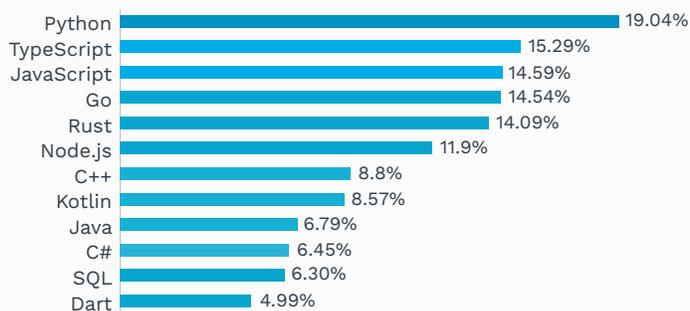


Software Development

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Software	\$107,533	\$124,348	\$128,004	\$158,061
Back End	\$96,434	\$126,882	\$129,812	\$160,656
.Net Architect			\$148,220	\$225,178
.Net Developer	\$93,600	\$124,000	\$104,000	\$137,000
Application Developer	\$105,882	\$130,705	\$132,432	\$150,088
BackEnd Developer	\$112,489	\$146,096	\$137,631	\$170,526
C++ Developer	\$117,500	\$141,896	\$128,518	\$179,296
Golang Developer	\$114,642	\$143,214	\$141,111	\$181,250
Java Architect			\$146,666	\$183,333
Java Developer	\$103,333	\$132,028	\$135,795	\$157,979
Microservices Engineer	\$119,090	\$147,727	\$138,400	\$168,200
Node.js Developer	\$113,421	\$139,166	\$127,272	\$164,545
PHP Developer	\$117,115	\$128,555	\$136,442	\$153,054
Platform Architect			\$188,000	\$250,000
Platform Engineer	\$120,294	\$164,823	\$141,923	\$188,653
Python Developer	\$124,729	\$135,757	\$156,288	\$176,568
Ruby on Rails Developer	\$116,694	\$155,169	\$138,571	\$173,075

Programming, Scripting & Markup Languages Developers Want to Work with Most in 2023

Stack Overflow



Most Desired (and Tested) Tech Stacks in Java and .Net

devskiller.com



1. Spring 35.96%
2. Spring Boot 20.47%
3. Hibernate 18.03%
4. Maven 16.08%
5. Gradle 8.77%



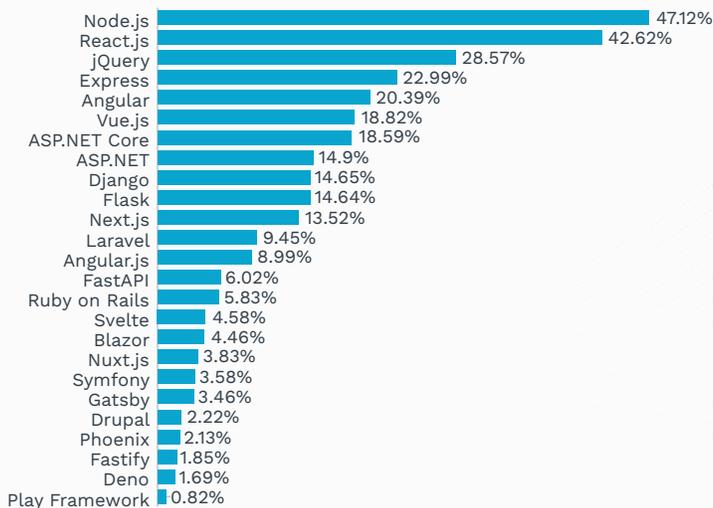
1. ASP.NET 45.93%
2. SQL Server 39.60%
3. MVC 36.35%
4. .NET Core 26.04%
5. Entity Framework 19.35%



	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Front End	\$103,710	\$136,659	\$120,871	\$148,940
Angular Developer	\$106,253	\$139,761	\$123,571	\$155,232
Javascript Developer	\$113,482	\$148,821	\$124,519	\$157,326
React Developer	\$110,155	\$146,666	\$127,591	\$160,068
General	\$110,950	\$145,158	\$143,083	\$170,719
Full Stack Software Developer	\$117,708	\$151,927	\$137,905	\$168,513
Gaming Engineer	\$112,157	\$162,589	\$144,000	\$176,000
Robotics Engineer	\$104,706	\$143,093	\$152,051	\$173,157
Sales Engineer	\$120,555	\$146,666	\$147,500	\$175,000
Salesforce Developer	\$112,259	\$134,630	\$143,630	\$153,817
Solutions Architect			\$142,115	\$176,192
Software Architect			\$148,421	\$185,263
Software Developer	\$98,314	\$132,044	\$129,038	\$157,810
SAP Developer	\$140,458	\$149,230	\$158,788	\$169,125
Technical Writer	\$109,475	\$117,247	\$124,659	\$132,833
Embedded	\$115,500	\$152,125	\$139,063	\$175,050
Embedded Engineer	\$115,000	\$151,250	\$133,125	\$170,100
Firmware Engineer	\$114,000	\$153,000	\$145,000	\$180,000

Most Commonly Used Web Frameworks

Source: Stack Overflow, 2022



Top 10 Tech Skills Most Needed in Job Postings

Source: DevSkiller

RANK	SKILL	% CHANGE
1.	Project Management	▲ 15%
2.	SQL	▲ 9%
3.	Java	▲ 7%
4.	Python	▲ 15%
5.	JavaScript	▲ 8%
6.	Linux	▲ 7%
7.	Scrum	▲ 21%
8.	Business Process	▲ 21%
9.	Technical Support	▲ 15%
10.	Quality Assurance & Control	▲ 14%





Product + UX, QA, Mobile, Functional

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Product & UX	\$100,276	\$121,667	\$122,624	\$150,051
Graphic Designer	\$85,644	\$82,451	\$87,895	\$93,743
Product Designer	\$109,769	\$138,615	\$135,406	\$167,613
Product Manager	\$119,530	\$151,267	\$134,869	\$171,993
UI Developer	\$99,000	\$123,000	\$135,666	\$173,333
UI/UX Designer	\$121,292	\$129,512	\$138,337	\$147,760

Product Designers salaries increased by 14.3% from 2021 to 2022.

SDET roles saw a 28% increase in salaries from 2021 to 2022.

QA	\$94,009	\$117,971	\$114,041	\$135,712
QA Analyst	\$78,500	\$97,000	\$117,857	\$127,857
QA Automation Engineer	\$100,075	\$122,018	\$109,062	\$133,750
QA Engineer	\$82,803	\$110,227	\$106,595	\$134,574
SDET	\$114,667	\$141,612	\$122,648	\$146,666
Mobile	\$123,810	\$155,620	\$130,586	\$169,298
Android Developer	\$123,870	\$156,129	\$140,909	\$178,409
iOS Developer	\$125,263	\$152,894	\$136,304	\$171,304
React Native Developer	\$122,297	\$157,837	\$114,545	\$158,181
Functional	\$102,982	\$126,397	\$124,437	\$149,589
Business Intelligence Analyst	\$98,500	\$132,100	\$120,250	\$148,250
Business Analyst	\$90,373	\$90,373	\$103,754	\$111,271
Product Owner	\$106,219	\$126,634	\$136,666	\$153,333
Project Manager	\$104,228	\$120,456	\$116,394	\$147,184
Program Manager	\$120,462	\$131,366	\$143,375	\$156,491
Project Coordinator	\$96,076	\$102,788	\$110,153	\$118,169

Top 6 Certifications for Product Development

1. Certified Scrum Master (CSM)
2. Project Management Professional (PMP)
3. Certified Manager Certification (CM)
4. Master Project Manager (MPM)
5. Certified Product Manager (CPM)
6. Certified Scrum Product Owner (CSPO)

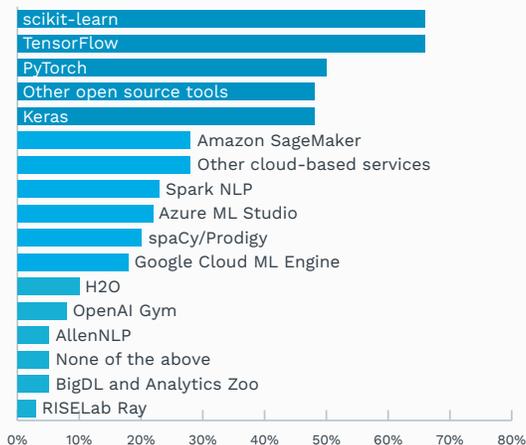


Data

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Data	\$109,349	\$141,319	\$134,927	\$176,011
AI Engineer	\$107,500	\$151,980	\$145,333	\$198,666
Business Intelligence Developer	\$107,666	\$123,333	\$132,500	\$152,250
Computer Vision Engineer	\$116,666	\$150,000	\$130,000	\$180,000
Data Architect			\$158,500	\$221,300
Data Analyst	\$94,594	\$118,837	\$117,647	\$149,823
Data Engineer	\$119,253	\$158,879	\$135,210	\$179,523
Data Modeler	\$96,553	\$118,686	\$128,752	\$157,748
Data Scientist	\$116,559	\$160,569	\$142,040	\$181,933
Database Engineer	\$118,636	\$145,000	\$139,344	\$181,425
Machine Learning Engineer	\$124,393	\$165,909	\$149,250	\$198,450
SQL Developer	\$91,666	\$120,000	\$105,625	\$135,000
Data Warehouse Analyst	\$120,186	\$130,104	\$141,576	\$154,601
Data Warehouse Developer	\$114,760	\$124,597	\$135,949	\$148,814
Database Administrator	\$129,916	\$140,049	\$151,561	\$164,450

Tools Used by Companies Mature in AI Adoption

Source: O'Reilly.com



Top 3 Skills Needed for AI by Tech Professionals

1. ML modeling and data science skills
2. Tools of the trade: scikit-learn and TensorFlow
3. Data preparation and collection





Infrastructure

According to a worldwide survey of IT executives, the biggest barrier to further utilize emerging cloud-based technologies is the lack of cloud skills in the IT workforce. However, with many companies moving to a multi-cloud environment, cloud-based career opportunities will continue to grow.

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Infrastructure	\$94,809	\$118,432	\$128,105	\$153,059
Cloud Architect			\$155,295	\$185,166
Cloud Engineer	\$115,138	\$150,657	\$129,583	\$171,666
Control Systems Engineer	\$103,764	\$119,529	\$129,270	\$140,163
DevSecOps Architect/Coach			\$172,500	\$205,000
DevOps Engineer	\$117,941	\$147,934	\$138,253	\$171,711
Technical Support Analyst	\$75,453	\$79,722	\$84,284	\$89,141
Helpdesk Support	\$66,650	\$74,904	\$79,111	\$83,937
Infrastructure and Security Architect			\$152,620	\$165,696
IT Systems Analyst	\$79,250	\$100,583	\$101,100	\$122,142
Linux Administrator	\$88,658	\$109,882	\$111,810	\$143,100
Network Architect			\$149,325	\$187,943
Network Administrator	\$76,814	\$93,526	\$106,178	\$114,815
Network Engineer	\$93,653	\$124,423	\$126,161	\$153,064
Site Reliability Engineer	\$125,271	\$154,567	\$144,883	\$186,976
Support Engineer	\$83,750	\$110,529	\$101,375	\$108,773
Systems Architect			\$148,505	\$169,250
Systems Administrator	\$89,434	\$109,130	\$105,857	\$138,571
Systems Engineer	\$97,241	\$125,517	\$125,961	\$154,033



Agile

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Agile	\$136,746	\$145,637	\$155,453	\$166,199
Agile Coach (Enterprise)	\$118,299	\$128,322	\$139,699	\$152,432
RTE/Release Train Engineer	\$157,628	\$165,767	\$174,419	\$183,592
Scrum Master	\$115,863	\$125,507	\$136,487	\$148,806

Highest Paying Tools to Know by 2023 (According to Tech Professionals)

Source: StackOverflow

- | | | | |
|---------------|------------------|-------------------|-----------------|
| 1. Chef | \$120,000 | 7. Ansible | \$83,232 |
| 2. Pulumi | \$111,504 | 8. Flow | \$78,177 |
| 3. Terraform | \$100,511 | 9. Docker | \$74,340 |
| 4. Puppet | \$95,979 | 10. Yarn | \$68,252 |
| 5. Homebrew | \$87,907 | 11. npm | \$64,333 |
| 6. Kubernetes | \$85,104 | 12. Unreal Engine | \$56,798 |
| | | 13. Unity 3D | \$59,327 |





Cyber, Security

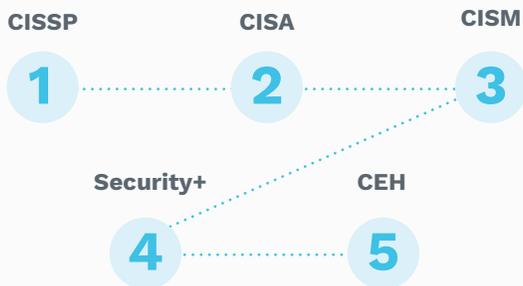
Top-10 In-Demand Cloud Skills, in Order:

- 1. Azure
- 2. AWS
- 3. Google Cloud
- 4. Cloud Fundamentals
- 5. Orchestration (Kubernetes)
- 6. Other Cloud Platforms
- 7. Cloud Infrastructure
- 8. Computer Resources
- 9. Cloud Migration
- 10. Virtualization

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
Security	\$112,196	\$138,020	\$134,193	\$163,205
(Cyber)Security Engineer	\$125,833	\$152,916	\$153,333	\$173,333
Application Security Engineer	\$128,611	\$170,540	\$138,750	\$181,250
DevSecOps Engineer	\$136,481	\$163,296	\$150,000	\$186,153
Information Security Analyst	\$97,000	\$103,000	\$115,333	\$138,333
Information Security Engineer	\$114,111	\$123,652	\$134,524	\$146,352
Network Security Engineer	\$113,333	\$148,333	\$120,000	\$155,000
Security Architect			\$146,607	\$185,000
Security Analyst	\$86,000	\$104,400	\$115,000	\$140,217

Adding Value: Certifications

These certifications are listed on the most job listings in the US:



87% of IT professionals have at least one certification, so going beyond your higher learning education is becoming a necessity.



12K A new certification has the ability to boost an IT professional's salary by \$12k or more.



MOTION RECRUITMENT

Tomorrow is Waiting LET'S GO.

Motion Recruitment provides premier IT staffing solutions (Contract, Contract-to-Hire, and Direct Hire) across 16 North American markets: Boston, New York, Philadelphia, Washington DC, Atlanta, Chicago, San Francisco, Silicon Valley, Los Angeles, Orange County, Charlotte, Phoenix, Greenville, Fort Worth, Dallas, and Toronto.

Motion Recruitment offers a unique and deep expertise in finding and placing candidates with the highest in demand tech skill sets, such as UI/UX, Open Source, Microsoft Development, Network Security & Infrastructure, and Mobile Development.

Our high-touch, specialized and team-based recruitment model, paired with our deep networks and knowledge of our local technology markets, result in an exemplary track record. Motion Recruitment is also the proud creator of Tech in Motion, an international tech event series that connects 100,000 tech enthusiasts to meet, learn, and innovate.

DATA SOURCES

The data in this salary guide represents real market compensation ranges derived from 15 major cities in North America. The base salary ranges are divided between Mid-level (2-5 years) and Senior-level experience levels (5+ years). Role ranges may vary by company size, industry and organization structure. All data is propriety to Motion Recruitment, validated by external sources, and subject to copyright and infringement protections. Contact Motion Recruitment for more detailed information based on your specific needs.

- **HIRING MANAGERS:** Contact one of our Recruiting Managers to request more information about local talent availability.

[CONTACT A RECRUITER](#)

- **JOB SEEKERS:** Visit our website to find information about open roles in your local market.

[APPLY TO A JOB](#)

