

MOTION  
RECRUITMENT

# TECH SALARY GUIDE

2023



FOR EMPLOYERS AND CANDIDATES

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CANADA



# 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

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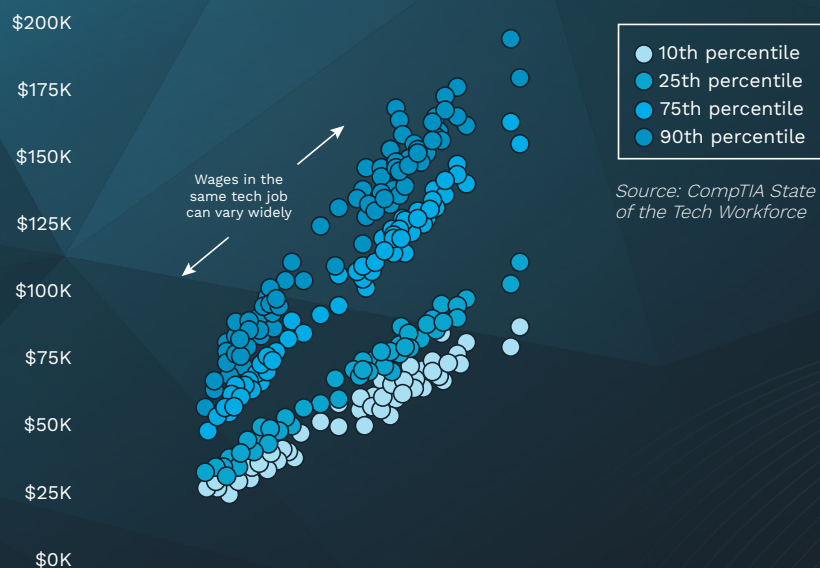
## Salaries & Trends

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

The Canadian tech industry remains a candidate's job market, with overall salaries increasing 6.5% 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



While some companies have been starting to request workers come into the office on a semi-regular basis, it is clear that the preference of the workforce is to remain in a remote work environment. 99% of tech workers surveyed said they were offered hybrid or fully remote work, 90% of Canadian teleworkers reported consistent or improved productivity rates working from home vs. the office, and businesses that are offering remote work are seeing 25% lower employee turnover.

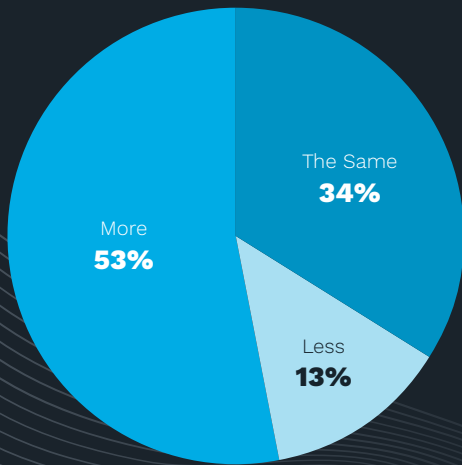
While a remote environment does lead to new challenges for businesses and managers to overcome, top Canadian tech workers now expect to be in a hybrid role at the very minimum, and many have a strong preference towards fully remote roles.

The increased acceptance of remote work has allowed American companies to increase their spending on Canadian workers. With many major companies already having offices in Canada, these businesses are utilizing Canada's talent pool to grow their workforce, along with bringing in workers from overseas to move to cities like Toronto.

Canada has clearly become a major player for tech talent, with Toronto in particular adding more tech jobs since 2016 than any other North American city. With more flexible immigration policies compared to the US, many tech workers from overseas are seeing Canada as a desirable destination to grow their careers.

**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

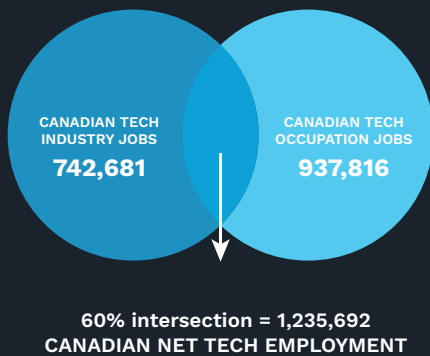
Remote, or not, companies are setting aside more budget for hiring developers, signaling the continuing demand and resilience when it comes to tech talent supply needs.

Not only are tech workers getting paid more, but there are still more tech positions overall. While job postings have come down from the peak of late spring/early summer of 2022, where there were over 120% increases in open positions, the vast majority of tech sectors are still in need of tech talent. For example, software development job postings are still above pre-pandemic levels as of this writing.

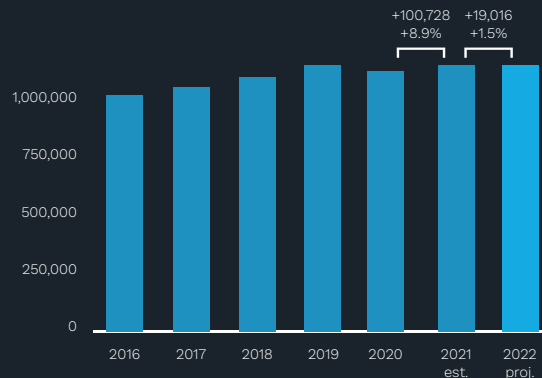
### Large Tech Talent Markets Growth From 2016-2021

| Market         | Tech Talent Total | Percent Change | by Volume | Concentration |
|----------------|-------------------|----------------|-----------|---------------|
| SF Bay Area    | 378,870           | 13%            | 42,460    | 11.4%         |
| New York Metro | 344,520           | 3%             | 8,880     | 4.0%          |
| Toronto        | 289,700           | 44%            | 88,900    | 10.3%         |
| Seattle        | 189,570           | 32%            | 45,560    | 9.9%          |

### Two Components of Canadian Tech Workforce



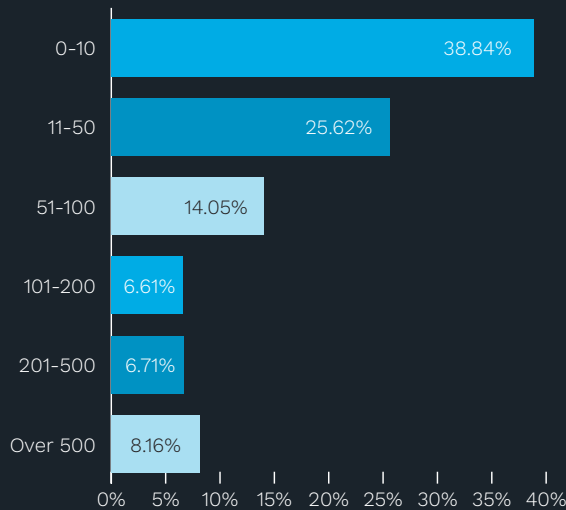
### Canadian Net Tech Employment Trending



Source: EMSI Burning Glass | Canadian Government Statistics | CompTIA

At the start of 2022, the Canadian tech employment population grew by 9% to over 1.2 million people, with that number projected to grow once again this year, albeit by a more modest 1.5%. Job postings grew at a higher percentage versus other occupations and the tech sector contributes over \$100 billion CAD of value to the economy. Even with demand being less ferocious compared to the previous year, almost 80% of organizations in Canada are on the lookout for tech employees.

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



Source: CodinGame & CoderPad Tech Hiring Survey 2022

CEOs across Canada agree with the fact that digital transformations of their companies are paramount to the success of their businesses. Nearly two-thirds of those surveyed said they believed driving digital transformation at a rapid pace is critical to attracting and retaining talent and customers, and 85% agreed that a strong cyber strategy is critical to building trust with key stakeholders.

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 teams. 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 till the spring of 2022, the tech industry was hiring at an extraordinarily rapid pace. 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, a combination of unrealistic expectations of productivity and returns, ongoing supply chain woes and continued growing inflation rates started to make the market untenable.

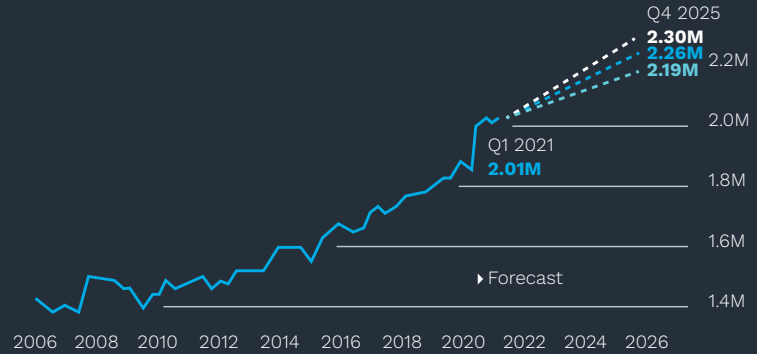
Numerous tech companies in the spring and summer announced hiring slowdowns or layoffs, with the crypto space hit especially hard during the spring and summer sell-off as Bitcoin lost 60% of its value, leading to Coinbase letting go of 18% of their staff.

However, despite the high-profile announcements of layoffs throughout 2022 and an increase in unemployment numbers, job vacancies remain at or near all-time highs, with nearly one million job vacancies across Canada.

Additionally, historically the tech industry has grown more resilient with every related bubble burst – requiring less recovery time after an economic crisis.

### Digital Economy

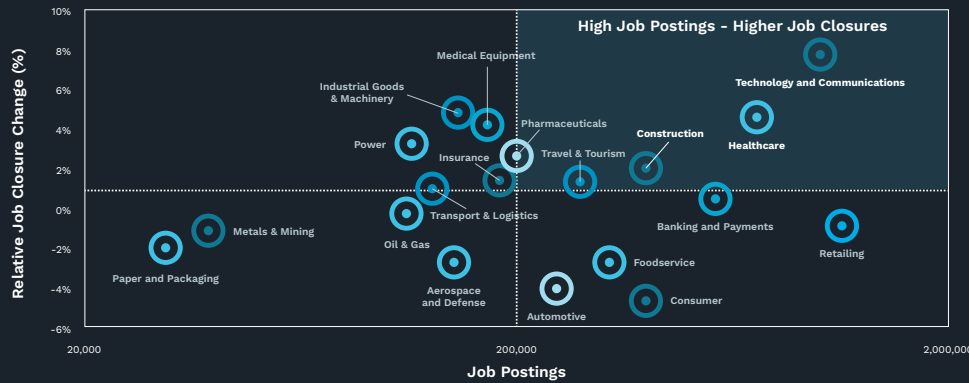
Employment forecast for Canada (2021-2025)



Source: ICTC Digital Outlook 2025 report. (Communitech graphic: Grace Stallard)

### Sector Map: Active Jobs, Q2 2022

Source: GlobalData Job Analytics Database



Posted Jobs: New jobs postings. Note: Relative job closures are closures in comparison to job postings during the review quarter

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 these jobs being added, is it enough to lessen 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 yet 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.

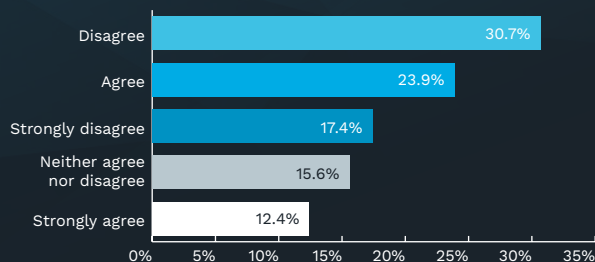
Even when talking about the layoffs mentioned earlier, the majority of job decreases at tech companies were not those held by tech workers. As some experts have stated, this economic downturn is more of a market correction, therefore companies with strong revenue growth and proper spending plans will continue to thrive, while those startups that have relied on VC funding to hire and expand are more at risk of seeing the well dry up.

The gap between the haves and have-nots inside the tech world continues to grow in 2022. Among companies that tried and failed to hire 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.

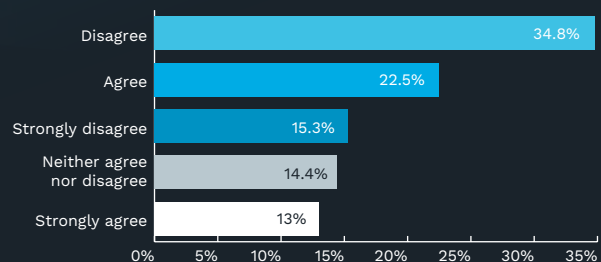
**76%** of IT and Technology employers report difficulty finding the skills required for their open roles

### 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 is that while overall employment across Canada dropped in August 2022, the number of people working in the professional, scientific and technical services sector actually grew and is over pre-pandemic levels.

#### GET ADVICE FROM THE EXPERTS:

What can companies do to compete for top tech talent?

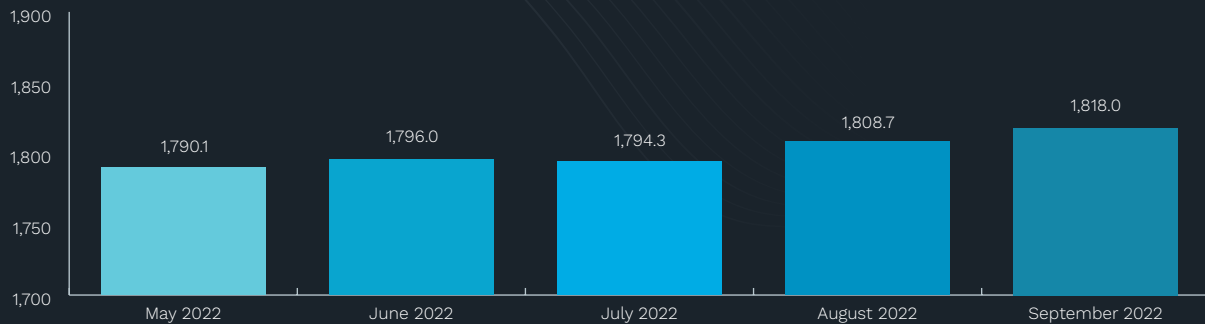




### Total Employment Rate Trends



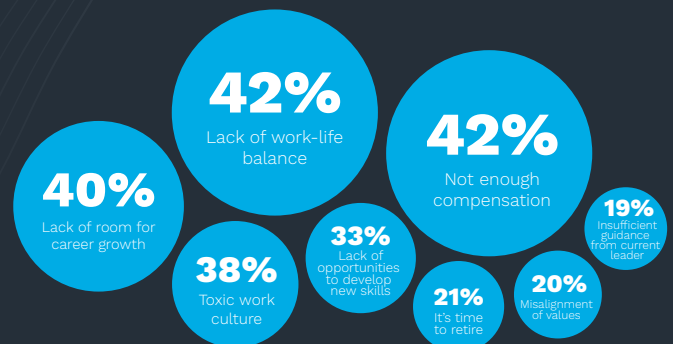
### Professional, scientific and technical services employment totals (in thousands):



## IT Professionals: When in Uncertain Times

With roles available all across the industry, tech workers across North America are continuing to move to new positions and companies. Tech companies surveyed across Canada saw 18.5% of their own workers depart over the past year, with sectors like e-commerce seeing more than 30% turnover. These numbers are not as high as what the United States is currently dealing with, this is an increase of what Canadian workplaces have had to deal with in years past. While compensation is the leading cause for people to search for a new place to work, there are various other important factors for Canadians in the tech world to leave their current employment.

### Why Technologists are Moving On From Their Current Jobs



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





Tech companies are seeing up to a **30%** talent turnover rate.

Since many Canadians have secured private healthcare in addition to universal healthcare provided by the country, it's no surprise that 33% of candidates want to see health benefits expanded. They also want to see retirement benefits prioritized, with almost half of job seekers citing it as the top area for improvement when it comes to benefits.

## How candidates rank their priorities (as of August 2022)

#1

### Compensation

Excellent compensation and benefits

#2

### Balance

Organizational support to balance work and personal life

#3

### Flexibility

Flexible work arrangements (i.e. when and where you work)

#4

### Upskilling

Opportunities to learn new, highly desired skills

Source: LinkedIn Global Talent Survey

But another priority for Canadian tech workers is overall mental health and well-being. What this leads to is workers willing to leave jobs to be able to gain more flexibility in their work, with 95% of Canadian workers wanting flexible hours as part of their employment.

A related aspect of the steady supply of tech workers heading to new opportunities is the normalizing of remote work. This is simply because that in a literal sense, it is just 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 from their current manager.

Although the Canadian tech community has been more cautious in changing their career course over the past few years, there's no denying that there are more people thinking about making a move than before the pandemic.

How can companies and job seekers navigate such an uncertain climate – for better or for worse?

**95%** of Canadian workers see flexible hours as a priority.



## 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?



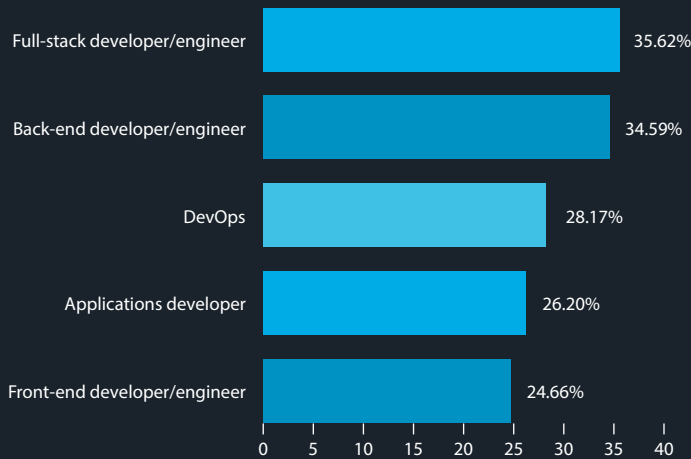
Source: CodinGame & CoderPad Tech Hiring Survey 2022

**68%** of Canadian businesses say they are struggling to hire skilled tech talent to foster measurable growth.

When it comes to the work that is the basis for many tech companies, there is still a tech talent shortage at all levels, with early 90% of CEOs expecting to increase their headcounts over the next three years. Additionally, 68% of Canadian businesses say they are struggling to hire skilled tech talent to foster measurable growth.

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 growth in the future. Software developers, hardware engineers, cybersecurity specialists and data experts are all valued at the top of today's job market.

## Top 5 positions recruiters will struggle to hire for 2022

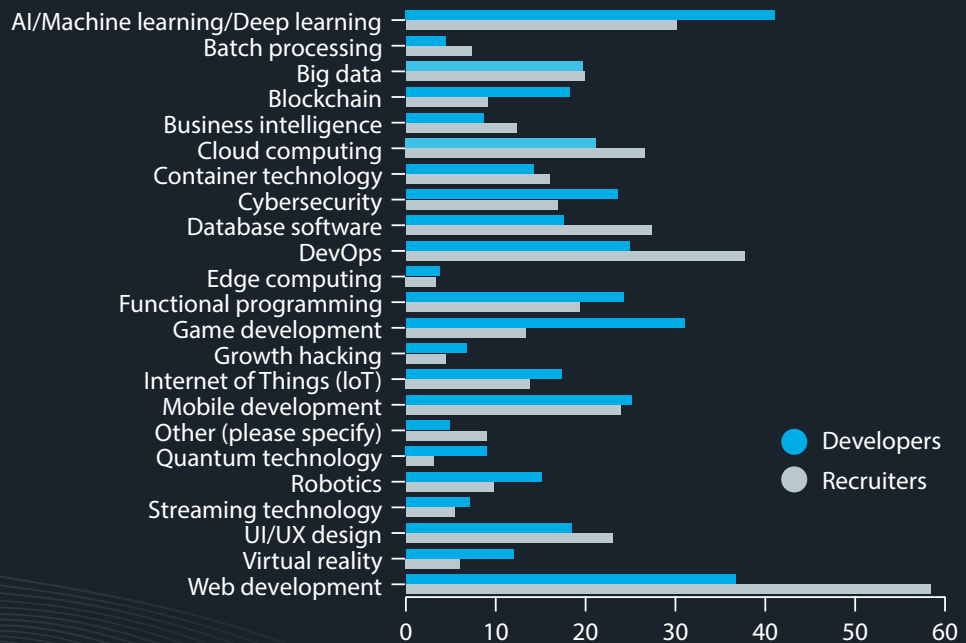


Source: CodinGame IT Hiring Trends 2022

While the optimism at the start of 2022 has waned as the year has gone by, 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.

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.

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

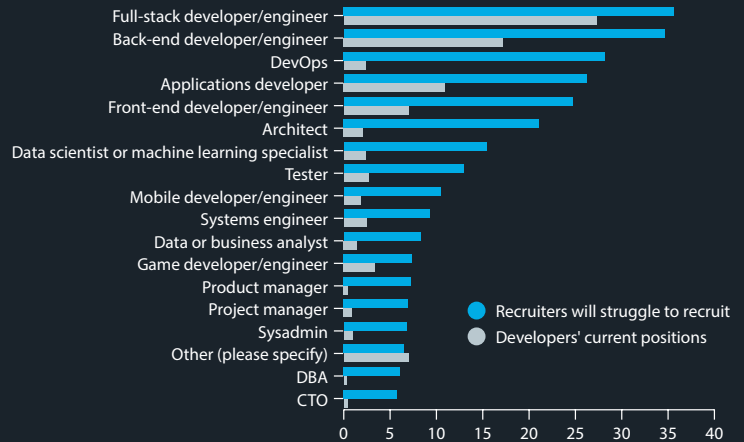


Source: CodinGame & CoderPad Tech Hiring Survey 2022

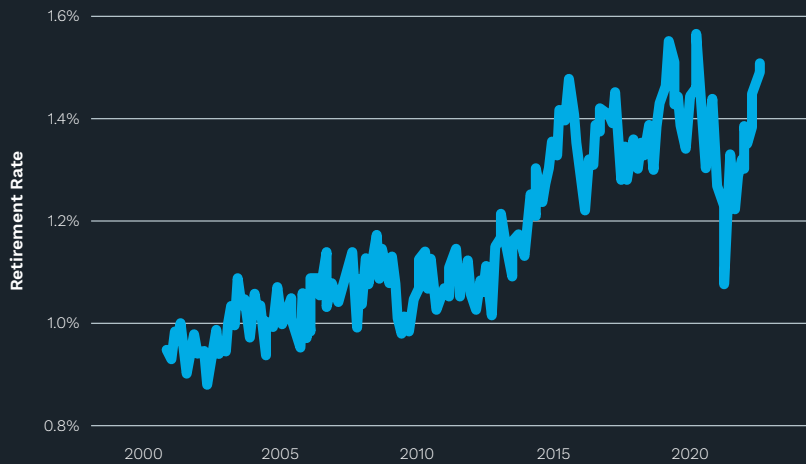


An issue that some businesses are dealing with at the moment, there may be a lack of inherited knowledge inside the company. There are a variety of reasons for this. First, there has been a 33% jump in retirements in the Canadian workforce over the past year, with that number expected to grow as the population ages. Additionally, while contracting should be an important part of a company's hiring process, having and keeping experienced workers that 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



### Retirement over the past year (as % of employment)



Source: The Hub calculations from Statistics Canada data tables 14-10-0125 and 14-10-0287

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 were saying that they were conducting 15, 20, and even up to 29 first-round interviews trying to find the right candidate to join the team. By narrowing down 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

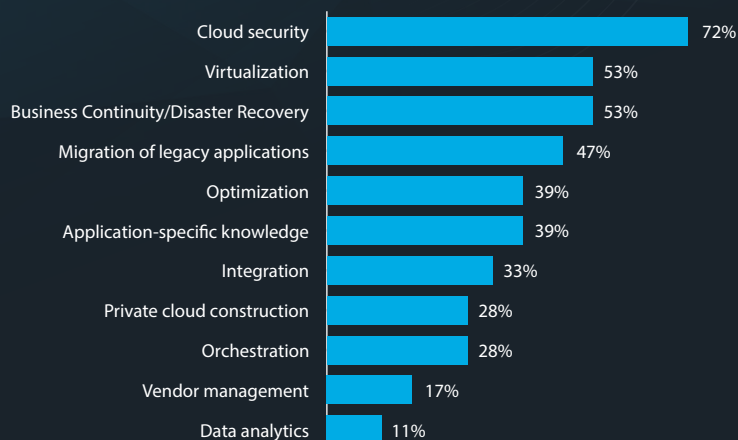
The future technology that was predicted in science fiction books decades ago is coming closer than ever to fruition. Self-driving cars, the metaverse, AI and machine learning and others are growing both in investments and popularity. With the majority of tech leaders saying they have or will increase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



### 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 Canada. 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



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) team 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 with Walmart planning to hire 5,000 tech workers as it expands investments in cloud and cyber security (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 roles are becoming the most in-demand skill for both companies to hire and tech workers to upskill.



**Cybersecurity has become the most in-demand skill for both companies to hire and tech workers to upskill.**



## AT A GLANCE: #1 Most Scarce Skill

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.



**3.12M**

cybersecurity workers needed to fill the global cybersecurity skills gap effectively.

## 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 skillsets, the standard made by Moore's Law, where computing power doubles every two years, has now been lapped, with exponential growth now being seen 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 cyber security, with some examples being AI software going through network traffic to spot malicious activity, and helping detect and evade ransomware attacks at a far better rate than being manually done.

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 of 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, companies are still spending major dollars to bring in people with machine learning and data analysis experience. According to the World Economic Forum, out of the 10 most in-demand roles by 2025, data-related roles make up the majority of the need.



**With a 500% increase, artificial intelligence and machine learning topped the list of fastest-growing skills in 2022.**

*Source: 2022 Skills Index (BTG)*



## 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 in 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 of the job market when it comes to this part of the tech world. 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. Also, companies across tech have been pouring 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 cryp-

### Top 10 occupations in the global blockchain industry for the top five talent types

| Top 10 | Engineering              | IT                               |
|--------|--------------------------|----------------------------------|
| 1      | Software Engineer        | Support Analyst                  |
| 2      | Senior Software Engineer | Security Engineer                |
| 3      | Bitcoin Miner            | Team Lead                        |
| 4      | Staff Software Engineer  | Data Analyst                     |
| 5      | Blockchain Developer     | Support Engineer                 |
| 6      | Engineer Manager         | Business Intelligence Consultant |
| 7      | Cryptologic Technician   | Technical Support Engineer       |
| 8      | DevOps Engineer          | System Engineer                  |
| 9      | Full Stack Engineer      | Data Engineer                    |
| 10     | Frontend Engineer        | IT Specialist                    |

### 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:



to 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.

Within the last decade, everything from business productivity software and AirBNB's, to gene editing, robotics, big data, and NFTs 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

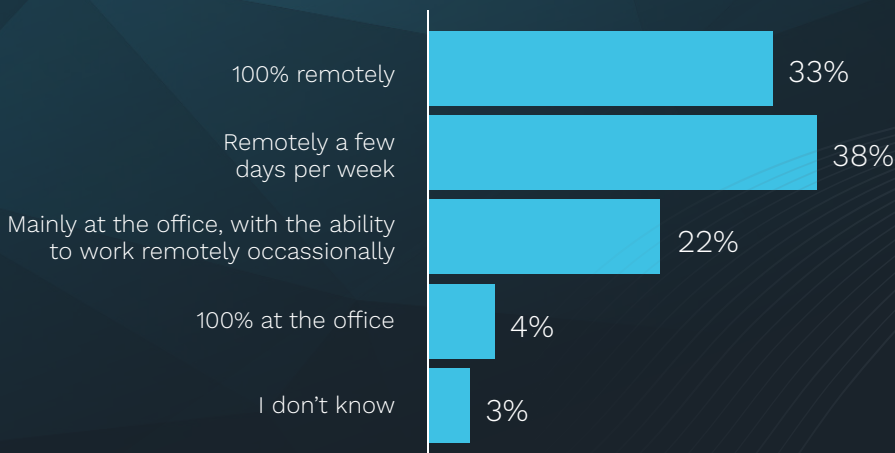
While there have been some interesting shifts that have happened over the past year, there are still many traits of the tech industry that have remained popular for tech workers and businesses.

### Work From Home is Here to Stay:

Even with the shift back to the office for many workers in the United States, in Canada the fact remains that remote work is still the default for many tech workers, and that trait is showing only minimal signs of abating. When talking to our Toronto recruiters, they told us that none of the companies they were working with were requiring coming into the office, and the hybrid approach of being local but going in once or twice a week is a rarity.



### Developers' Preferences for Work Situation



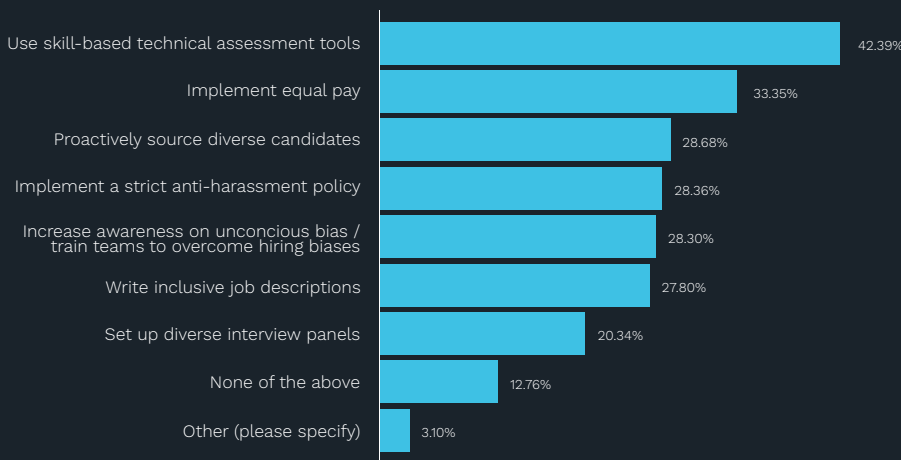
Source: CodinGame & CoderPad Tech Hiring Survey 2022

While the opinion of remote work from managers is mixed, for workers it is clear: remote work is where they want to be. 75% of workers say they have more time and energy due to a lack of a commute, and 70% say they have enjoyed working from home more than they expected.

## DE&I Efforts Grow in Importance:

For the tech community, being a part of a company that places an emphasis on DE&I initiatives is something that they are looking for. Not only that, but those in the tech world are also looking to take an active part in these programs with things like Employee Recourse 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?

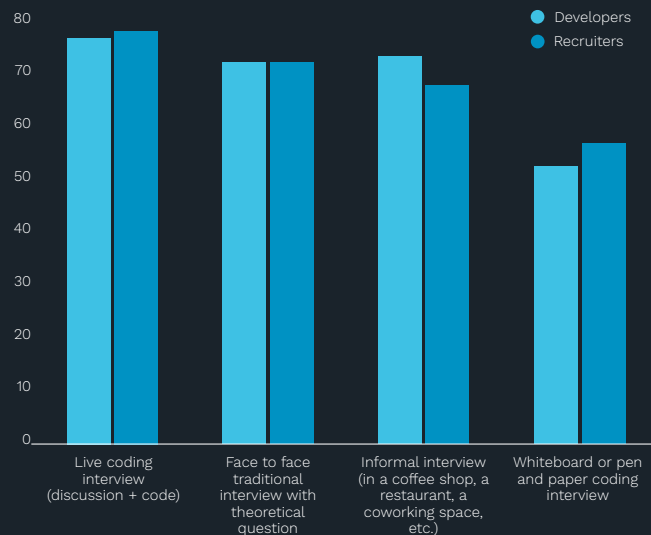


Individuals identifying within these groups also want to ensure that their voices are heard, with 80% of employees believing that company leaders should take actions to address DEI issues, with 47% saying they are not seeing those in management positions take the necessary steps.

## Condensed Hiring Processes:

Over 90% of tech hiring leaders and engineering leaders said that improving a company’s software engineering hiring process is something somewhat or very 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. While those looking for a job in senior level positions should still expect to take a brief skills test, putting undue labor on applicants can be a turn off for candidates that might have been a great fit for a certain 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 salaries are continuing to climb and opportunities are available across the space.

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.
- **The Yanks Come Marching In:** American companies are upping their spending in Canada, hiring more workers and forcing homegrown businesses to adjust to the foreign competition. Amazon is primed to add 600 tech jobs, Meta is looking to hire 2,500, and Google stated it wanted to triple its workforce in Canada. Because of the relative affordability of tech workers here compared to trying to hire major tech hubs in the United States, major American companies see Canada as a gold mine of tech talent.
- **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 after proving worth are given 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

## For Companies

- **Offer Upskilling Opportunities:** Outside of salaries and overall compensation, one of the biggest benefits candidates are looking for in the job market today is to learn new skills while on the job. Already, 40% of employers are attempting to upskill workers to address labor shortages, so companies that are not offering these opportunities are already behind.

### Employers are focusing on internal measures to address skills and labour shortages

Actions employers are taking to address skills and labour shortages, % of respondents<sup>1</sup>



<sup>1</sup>Respondents who agreed their country lacks people with the skills to do their work (n = 24,001).

Respondents who stated "other", "nothing" or "don't know" are not shown.

Source: PwC's 2022 Global Workforce Hopes and Fears Survey of 52,195 workers across 44 countries and territories

**READ MORE:** How to Find Success in The Hybrid Workplace

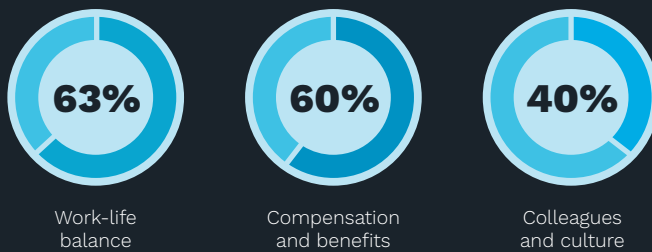


- **Show, Don't Tell Culture:** With such job fluidity for top talent, businesses need to "show" how they value employees. For companies wanting workers to come back in office, that means demonstrating why having employees under one roof is important for both sides of the equation. Tech companies need to show that promoting a workplace culture isn't just a bunch of buzzwords, but with tangible actions behind them.

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 of what an employee thinks about the business they work for.

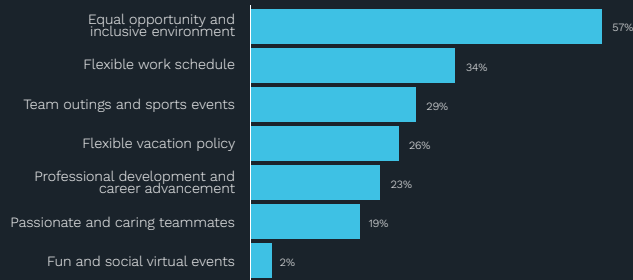
## Work-life balance trumps even bank balance for job seekers

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



Source: LinkedIn Global Talent Survey, October 2022

## Non-Financial Benefits



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

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:** Related to what job seekers should do, 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 doing?

Understanding your market and the opportunities can also be a factor in hiring – Canada is one of the more opportunistic markets for skilled tech candidates to move into from outside the country. If you're not familiar with programs like the BC Tech Stream or Express Entry and how to secure tech talent through immigration, Canada's flexible and responsive policies are something to look into leveraging.

Additionally, 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 in the slightest. Almost daily there are new and exciting opportunities for the tech community, 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 the field 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 the tech industry, and we are always ready to hear your feedback, talk strategy, and work with you to lead you on a 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 outlines the Toronto-specific salaries across 120+ in-demand tech roles in Canada.

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### Tech Salary Ranges

- 25** Management and Executive
- 26** Software Development
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- 28** QA, Mobile
- 28** Functional
- 29** Data
- 30** Infrastructure
- 30** Agile
- 31** Cyber, Security



## CANADA 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   | \$202,869 | \$304,304 |
| VP of Engineering        | \$186,640 | \$231,271 |
| Chief Technology Officer | \$169,396 | \$213,013 |
| Creative Director        | \$152,152 | \$223,156 |
| Director of Engineering  | \$159,252 | \$198,812 |
| Engineering Manager      | \$147,080 | \$180,554 |



### 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.





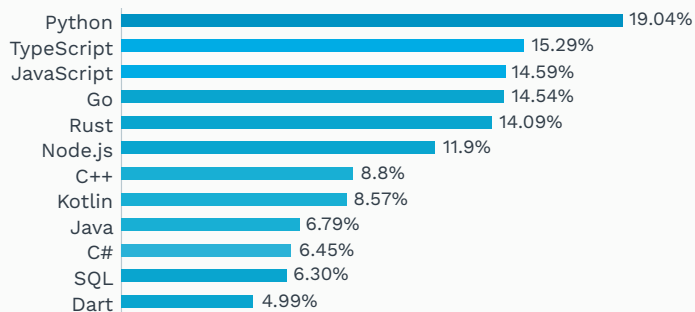


## Software Development

|                         | MID LEVEL        |                  | SENIOR LEVEL     |                  |
|-------------------------|------------------|------------------|------------------|------------------|
|                         | LOW              | HIGH             | LOW              | HIGH             |
| <b>Software</b>         | <b>\$101,281</b> | <b>\$130,567</b> | <b>\$123,610</b> | <b>\$151,465</b> |
| <b>Back End</b>         | <b>\$106,898</b> | <b>\$133,006</b> | <b>\$131,055</b> | <b>\$163,556</b> |
| .Net Architect          |                  |                  | \$137,407        | \$208,750        |
| .Net Developer          | \$ 88,158        | \$116,791        | \$97,954         | \$129,035        |
| Application Developer   | \$99,726         | \$123,106        | \$124,733        | \$141,362        |
| BackEnd Developer       | \$105,949        | \$137,602        | \$129,630        | \$160,612        |
| C++ Developer           | \$110,669        | \$133,647        | \$121,046        | \$168,872        |
| Golang Developer        | \$107,977        | \$134,888        | \$132,907        | \$170,713        |
| Java Architect          |                  |                  | \$138,139        | \$172,675        |
| Java Developer          | \$97,326         | \$124,352        | \$127,900        | \$148,795        |
| Microservices Engineer  | \$112,166        | \$139,139        | \$130,354        | \$158,421        |
| Node.js Developer       | \$106,827        | \$131,075        | \$119,873        | \$154,979        |
| PHP Developer           | \$110,306        | \$121,081        | \$128,510        | \$144,156        |
| Platform Architect      |                  |                  | \$177,070        | \$235,466        |
| Platform Engineer       | \$113,300        | \$155,241        | \$133,672        | \$177,685        |
| Python Developer        | \$117,478        | \$127,865        | \$147,202        | \$166,303        |
| Ruby on Rails Developer | \$109,910        | \$146,148        | \$130,515        | \$163,013        |

### 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%



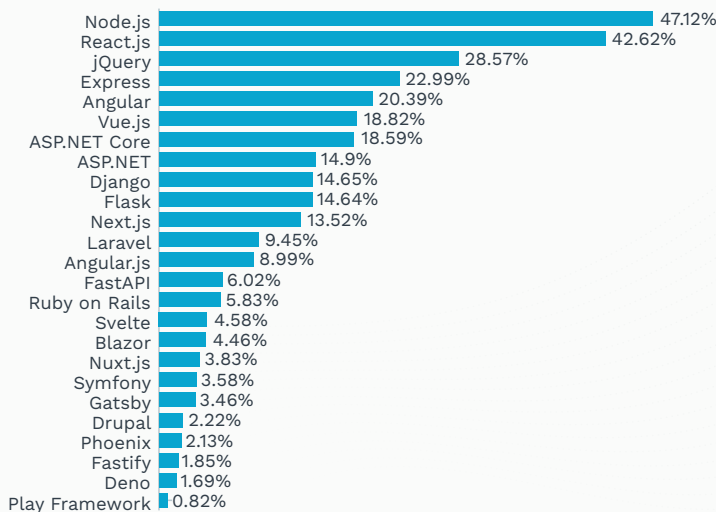
1. ASP.NET 45.93%
2. SQL Server 39.60%
3. MVC 36.35%
4. .NET Core 26.04%
5. Entity Framework 19.35%



|                               | MID LEVEL        |                  | SENIOR LEVEL     |                  |
|-------------------------------|------------------|------------------|------------------|------------------|
|                               | LOW              | HIGH             | LOW              | HIGH             |
| <b>Front End</b>              | <b>\$97,680</b>  | <b>\$128,714</b> | <b>\$113,844</b> | <b>\$140,281</b> |
| Angular Developer             | \$100,076        | \$131,636        | \$116,387        | \$146,207        |
| Javascript Developer          | \$106,885        | \$140,169        | \$117,280        | \$148,180        |
| React Developer               | \$103,751        | \$138,139        | \$120,173        | \$150,762        |
| <b>General</b>                | <b>\$104,500</b> | <b>\$136,719</b> | <b>\$134,764</b> | <b>\$160,794</b> |
| Full Stack Software Developer | \$110,865        | \$143,094        | \$129,888        | \$158,716        |
| Gaming Engineer               | \$105,637        | \$153,137        | \$135,628        | \$165,768        |
| Robotics Engineer             | \$98,619         | \$134,774        | \$143,211        | \$163,090        |
| Sales Engineer                | \$113,546        | \$138,139        | \$138,925        | \$164,826        |
| Salesforce Developer          | \$105,733        | \$126,803        | \$135,280        | \$144,875        |
| Solutions Architect           |                  |                  | \$133,853        | \$165,949        |
| Software Architect            |                  |                  | \$139,792        | \$174,492        |
| Software Developer            | \$92,598         | \$124,367        | \$121,536        | \$148,635        |
| SAP Developer                 | \$132,292        | \$140,554        | \$149,557        | \$159,293        |
| Technical Writer              | \$103,110        | \$110,431        | \$117,412        | \$125,110        |
| <b>Embedded</b>               | <b>\$108,785</b> | <b>\$143,281</b> | <b>\$130,978</b> | <b>\$164,873</b> |
| Embedded Engineer             | \$108,314        | \$142,457        | \$125,386        | \$160,211        |
| Firmware Engineer             | \$107,372        | \$144,105        | \$136,570        | \$169,535        |

## 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             |
| <b>Product &amp; UX</b> | <b>\$88,072</b> | <b>\$106,859</b> | <b>\$107,700</b> | <b>\$131,789</b> |
| Graphic Designer        | \$75,221        | \$72,416         | \$77,198         | \$82,334         |
| Product Designer        | \$96,410        | \$121,745        | \$118,927        | \$147,214        |
| Product Manager         | \$104,983       | \$132,857        | \$118,455        | \$151,061        |
| UI Developer            | \$86,951        | \$108,031        | \$119,155        | \$152,238        |
| UI/UX Designer          | \$106,530       | \$113,750        | \$121,501        | \$138,841        |

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

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

|                               |                  |                  |                  |                  |
|-------------------------------|------------------|------------------|------------------|------------------|
| <b>QA</b>                     | <b>\$88,544</b>  | <b>\$111,113</b> | <b>\$107,411</b> | <b>\$127,822</b> |
| QA Analyst                    | \$73,936         | \$91,361         | \$111,005        | \$120,424        |
| QA Automation Engineer        | \$94,257         | \$114,924        | \$102,721        | \$125,974        |
| QA Engineer                   | \$77,989         | \$103,819        | \$100,398        | \$126,750        |
| SDET                          | \$108,001        | \$133,379        | \$115,518        | \$138,139        |
| <b>Mobile</b>                 | <b>\$134,263</b> | <b>\$168,759</b> | <b>\$141,611</b> | <b>\$183,592</b> |
| Android Developer             | \$134,328        | \$169,311        | \$152,806        | \$193,472        |
| iOS Developer                 | \$135,839        | \$165,803        | \$147,812        | \$185,767        |
| React Native Developer        | \$132,623        | \$171,163        | \$124,216        | \$171,536        |
| <b>Functional</b>             | <b>\$92,891</b>  | <b>\$114,010</b> | <b>\$112,242</b> | <b>\$134,930</b> |
| Business Intelligence Analyst | \$88,847         | \$119,155        | \$108,466        | \$133,722        |
| Business Analyst              | \$81,517         | \$81,517         | \$93,587         | \$100,367        |
| Product Owner                 | \$95,810         | \$114,224        | \$123,273        | \$138,307        |
| Project Manager               | \$94,014         | \$108,652        | \$104,988        | \$132,761        |
| Program Manager               | \$108,657        | \$118,493        | \$129,325        | \$141,156        |
| Project Coordinator           | \$86,661         | \$92,715         | \$99,359         | \$106,589        |

### 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)

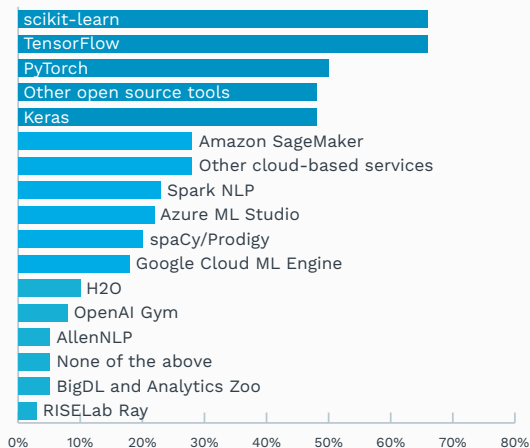


## Data

|                                 | MID LEVEL        |                  | SENIOR LEVEL     |                  |
|---------------------------------|------------------|------------------|------------------|------------------|
|                                 | LOW              | HIGH             | LOW              | HIGH             |
| <b>Data</b>                     | <b>\$104,730</b> | <b>\$135,351</b> | <b>\$129,229</b> | <b>\$168,577</b> |
| AI Engineer                     | \$102,960        | \$145,561        | \$139,195        | \$190,275        |
| Business Intelligence Developer | \$103,119        | \$118,124        | \$126,904        | \$145,820        |
| Computer Vision Engineer        | \$111,739        | \$143,665        | \$124,510        | \$172,398        |
| Data Architect                  |                  |                  | \$151,806        | \$211,954        |
| Data Analyst                    | \$90,599         | \$113,818        | \$112,678        | \$143,495        |
| Data Engineer                   | \$114,216        | \$152,169        | \$129,499        | \$171,941        |
| Data Modeler                    | \$92,475         | \$113,673        | \$123,314        | \$151,086        |
| Data Scientist                  | \$111,636        | \$153,787        | \$136,041        | \$174,249        |
| Database Engineer               | \$113,625        | \$138,876        | \$133,459        | \$173,763        |
| Machine Learning Engineer       | \$119,139        | \$158,902        | \$142,947        | \$190,069        |
| SQL Developer                   | \$87,795         | \$114,932        | \$101,164        | \$129,298        |
| Data Warehouse Analyst          | \$115,110        | \$124,609        | \$135,597        | \$148,072        |
| Data Warehouse Developer        | \$109,913        | \$119,335        | \$130,207        | \$142,529        |
| Database Administrator          | \$124,429        | \$134,134        | \$145,160        | \$157,505        |

## 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             |
| <b>Infrastructure</b>                 | <b>\$78,731</b> | <b>\$98,348</b> | <b>\$106,381</b> | <b>\$127,103</b> |
| Cloud Architect                       |                 |                 | \$145,921        | \$173,989        |
| Cloud Engineer                        | \$95,613        | \$125,108       | \$121,761        | \$161,304        |
| Control Systems Engineer              | \$86,167        | \$99,259        | \$107,348        | \$116,394        |
| DevSecOps Architect/Coach             |                 |                 | \$143,247        | \$170,236        |
| DevSecOps Engineer                    | \$97,940        | \$139,005       | \$135,861        | \$168,741        |
| Technical Support Analyst             | \$62,658        | \$66,203        | \$69,991         | \$74,024         |
| Helpdesk Support                      | \$55,347        | \$62,202        | \$65,695         | \$69,703         |
| Infrastructure and Security Architect |                 |                 | \$126,738        | \$162,830        |
| IT Systems Analyst                    | \$65,811        | \$83,526        | \$83,955         | \$101,429        |
| Linux Administrator                   | \$73,623        | \$91,248        | \$92,849         | \$118,833        |
| Network Architect                     |                 |                 | \$124,002        | \$156,071        |
| Network Administrator                 | \$63,788        | \$77,666        | \$88,172         | \$95,344         |
| Network Engineer                      | \$77,771        | \$103,323       | \$104,766        | \$127,107        |
| Site Reliability Engineer             | \$104,027       | \$128,355       | \$136,138        | \$175,690        |
| Support Engineer                      | \$69,548        | \$91,785        | \$84,184         | \$90,327         |
| Systems Architect                     |                 |                 | \$123,321        | \$140,548        |
| Systems Administrator                 | \$74,268        | \$90,624        | \$87,906         | \$115,072        |
| Systems Engineer                      | \$80,751        | \$104,232       | \$104,600        | \$127,912        |



## Agile

|                            | MID LEVEL        |                  | SENIOR LEVEL     |                  |
|----------------------------|------------------|------------------|------------------|------------------|
|                            | LOW              | HIGH             | LOW              | HIGH             |
| <b>Agile</b>               | <b>\$128,492</b> | <b>\$136,846</b> | <b>\$146,070</b> | <b>\$156,167</b> |
| Agile Coach (Enterprise)   | \$111,158        | \$120,576        | \$131,267        | \$143,231        |
| RTE/Release Train Engineer | \$148,114        | \$155,761        | \$163,891        | \$172,510        |
| Scrum Master               | \$108,870        | \$117,931        | \$128,249        | \$139,824        |

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

Source: StackOverflow

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





# Cyber, Security

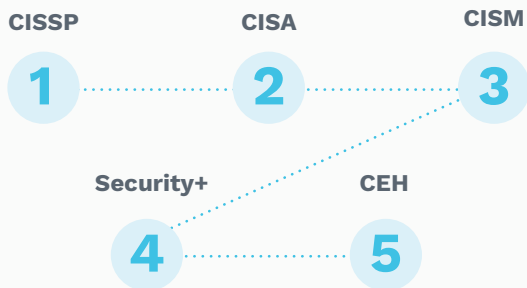
## Top-10 In-Demand Cloud Skills, in Order:

- 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             |
| <b>Security</b>               | <b>\$110,255</b> | <b>\$135,632</b> | <b>\$131,872</b> | <b>\$160,382</b> |
| (Cyber)Security Engineer      | \$123,656        | \$150,271        | \$150,681        | \$170,335        |
| Application Security Engineer | \$126,386        | \$167,590        | \$136,350        | \$178,115        |
| DevSecOps Engineer            | \$134,120        | \$160,471        | \$147,405        | \$182,933        |
| Information Security Analyst  | \$95,322         | \$101,218        | \$113,338        | \$135,940        |
| Information Security Engineer | \$112,137        | \$121,513        | \$132,197        | \$143,820        |
| Network Security Engineer     | \$111,373        | \$145,767        | \$117,924        | \$152,319        |
| Security Architect            |                  |                  | \$144,071        | \$181,800        |
| Security Analyst              | \$84,512         | \$102,594        | \$113,011        | \$137,791        |

## 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.

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