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# Tech Salary Guide

For Employers and Candidates

Canada ///



# The State of Tech Employment

2024 is an opportunity for tech workers and companies to grow and evolve in exciting ways as technology continues to advance and change at a rapid pace.

Despite 2023's ups and downs, we see the strength and resiliency of the IT community, which continues to optimize the way work is done amid digital transformation, workplace changes and technological growth in areas like artificial intelligence. Unsurprisingly, overall tech unemployment rates remain far lower than other sectors, and the talent gap remains high.

To continue this path to growth, it is crucial to have an innate understanding of the IT job market and the value different positions provide. Having that knowledge is vital to your success in 2024, and we hope this report and our specialized tech teams can help make it as smooth as possible to navigate.

**Matt Milano**  
President,  
Motion Recruitment



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# The State of Tech Employment

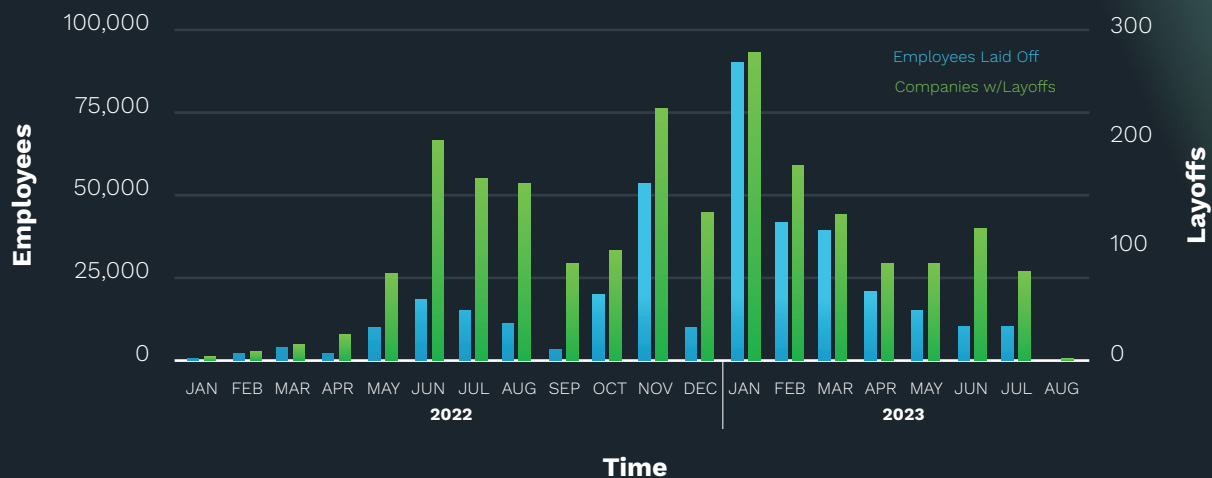
## Tech Employment Trends

The Canadian tech market has seen some drastic shifts over the past few years, going from one of the best candidate markets in recent memory to companies downsizing and causing thousands of layoffs across the country. Despite all of this, the IT job market is still one of the best sectors to be a part of, with signs showing an upswing in opportunities throughout 2024.

Over the past few years, the number of tech workers in Canada exploded, with the workforce expanding by over 150,000 people between 2020 and 2022. Many American businesses were looking north to find talented employees at a lower salary compared to places like San Francisco, and tech companies founded in Canada were looking to grow quickly.

## Tech Layoffs in 2022-2023

Source: layoffs.fyi, 2023

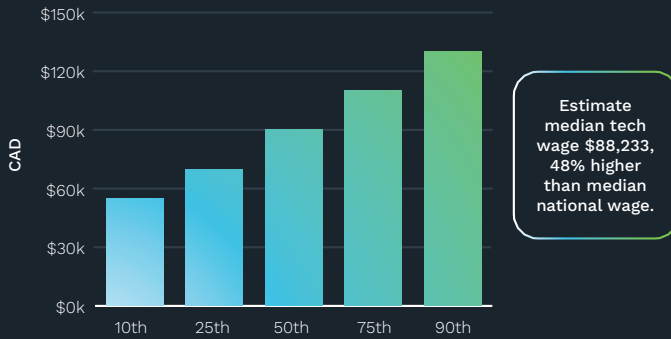


However, at the end of 2022 heading into the first quarter of 2023, there seemed to be a new headline daily about layoffs in different companies across North America. In fact, the start of 2023 saw the biggest wave of layoffs in the past decade, with 150% more layoffs in the first half of 2023 versus the year prior. Reasons for this varied from company to company, from rising interest rates and inflation concerns to course-correcting from over-hiring.

Even with these seemingly catastrophic numbers, layoffs only rolled the tech industry back by 8% of the post-pandemic growth.

## Tech Occupation Wages (by percentile)

Source: CompTIA's 2023 State of Workforce Canada Report

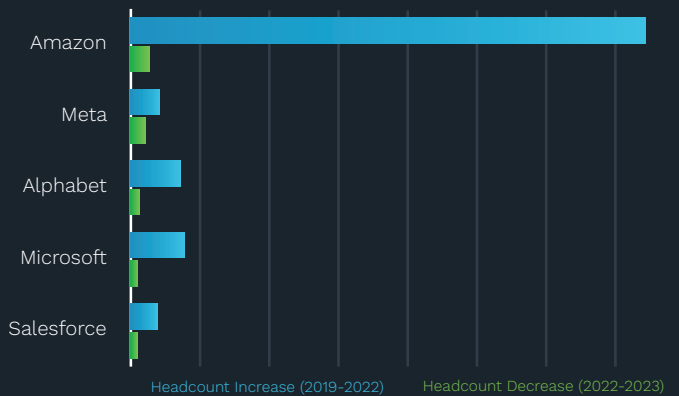


Despite the unease in the market, overall tech salaries still saw an increase this year, with Toronto salaries rising 5.1% on average, deviating from the nearly exponential growth of the past decade.

Clearly, it isn't doom and gloom when it comes to the Canadian tech talent market. While tech companies did let people go in 2023, it was not necessarily tech workers being the ones looking for new employment. Internal recruitment teams, HR and marketing were hit harder as opposed to tech roles.

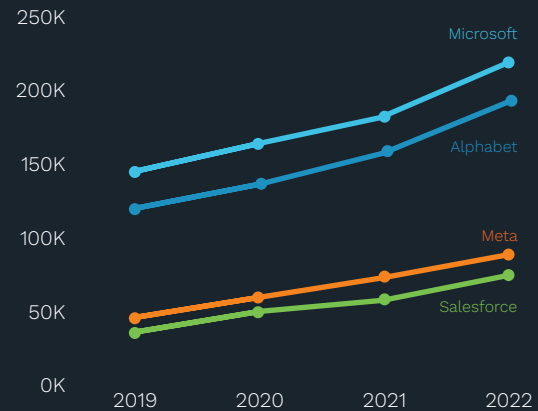
## Tech Company Headcount 2019-2023

Source: 2023 Layoffs At Big Tech Companies by Crunchbase News



## Large Tech Companies Employees 2019 -2022

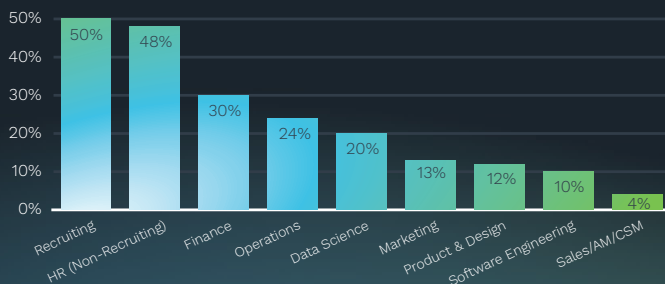
Source: 2023 Layoffs At Big Tech Companies by Crunchbase News



Additionally, there are signs of growth heading to the end of 2023 into the new year. In August 2023, professional, scientific and technical services employment increased by 52,000 jobs, with computer systems, designs, and other related services jobs increasing by 20,000 year over year.

## Workers Laid Off by Department

Source: Interviewing.io's Layoff Data Analysis



All that being said, none of this is to diminish the number of layoffs that many had to deal with in 2023. Those are people who had to deal with the uncertainty of trying to find a new position while reading article after article about how the industry is crumbling. What the middle of 2023 showed is the resiliency of the IT industry and the people inside it.

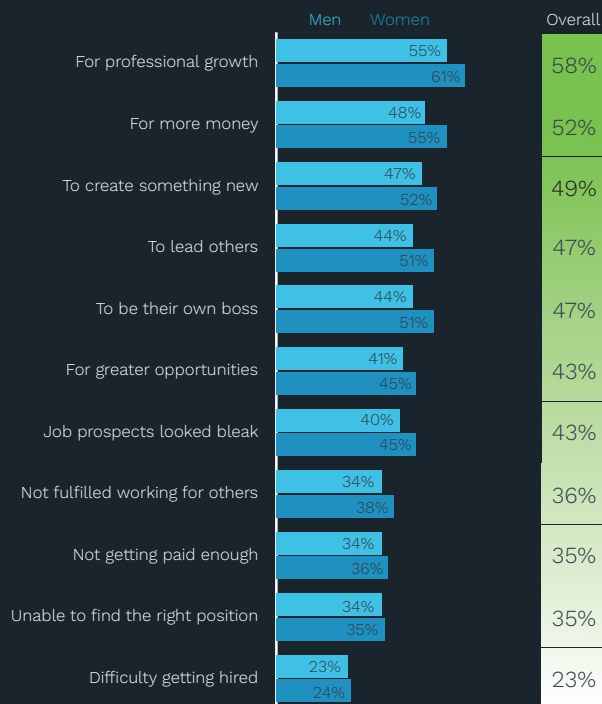
## Canadian Employment Trends

Source: Statistics Canada Labour Force Survey, 2023



## Top Reasons Tech Workers Decided to Start a Company After Being Laid Off

Source: 2022 Clarify Capital Survey



Share of tech workers who say they decided to start a new business due to each factor

Canada has seen growth for technologists both in the tech industry and outside it – with a 2.8% increase in overall employment year-over-year for professional, scientific and technical services.

Talent reabsorption followed any layoffs, while also opening up new opportunities; for instance, many displaced tech workers moved out of larger technology firms and into smaller firms in other industries, a number that rose from 37% in 2022 to 46% in 2023 for tech, information and media professionals.

If those who were laid off couldn't find a role that met their expectations, many of them decided to make one for themselves by forming their own company. 63% of tech workers who were laid off said that they started their own company within 12 months of losing their job, with 93% of that group directly competing against their former employer.



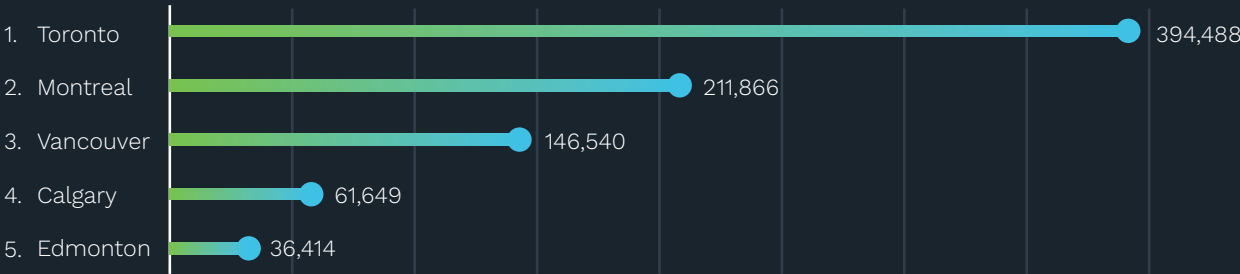
# Looking Forward to 2024

## Tech Talent Demand in 2024

The Canadian tech market has many reasons to be optimistic about 2024, having an opportunity to grow the workforce to its highest levels yet. While dropping two spots on the list, Toronto is still ranked 5th of the top tech talent markets in North America, with Vancouver coming in at 8th and Montreal in 12th.

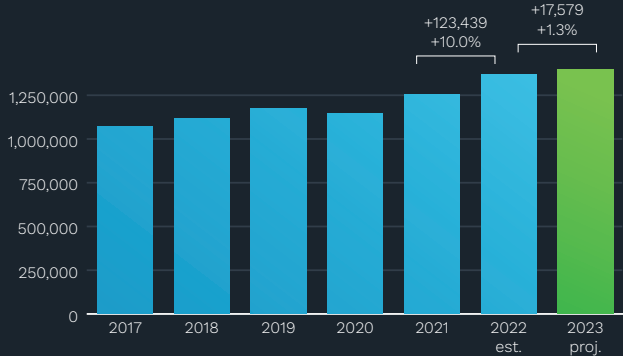
## Top Metros by Net Tech Employment (2023 Projected)

Source: 2023 State of the Tech Workforce Canada, Comp TIA



## Net Tech Employment Trending

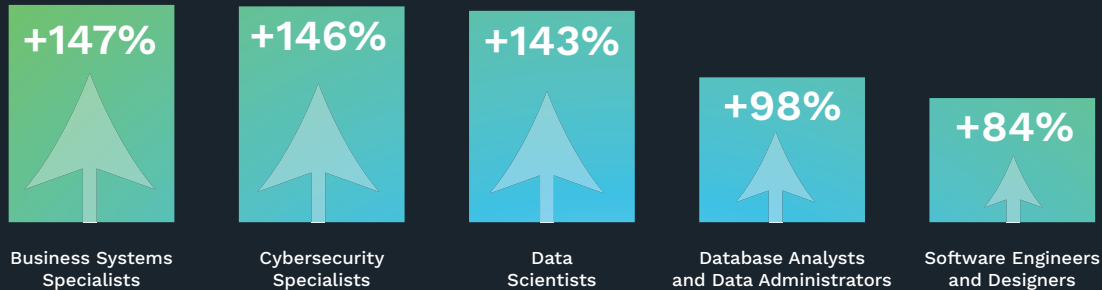
Source: 2023 State of the Tech Workforce Canada, Comp TIA



Some sectors of tech have begun to diminish in importance when it comes to hiring managers, as some of our recruiters have relayed that in the mobile space, the move has gone to looking for exclusively hybrid developers, as specialists have dropped in demand. On the other side, software developers and cybersecurity roles continued to be needed, with thousands of roles for those tech workers remaining unfilled.

## Largest Tech Occupation Job Gains (% change)

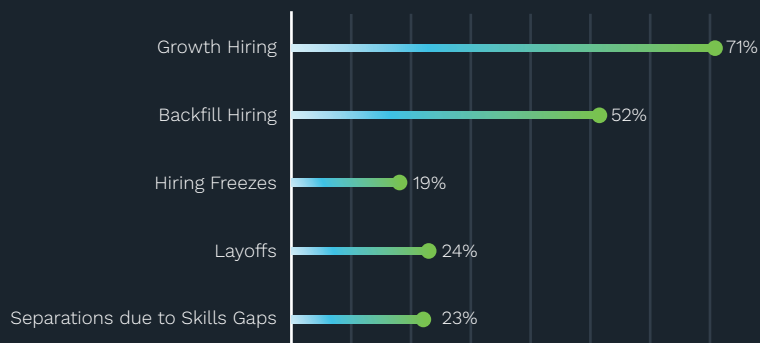
Source: CompTIA's 2023 State of the Tech Workforce Canada



Companies outside of the tech space that were less affected by the early-year panic continued to grow and were looking to enhance their position in the technology space. 71% of HR professionals outside of tech companies said they are hiring for growth, with 52% also saying they are backfill hiring. This is giving tech workers the opportunity to move to tech roles inside companies that might not be on the cutting edge but offer stable jobs at levels of income that are expected for those roles.

## HR Pros and the Pace of Hiring

Source: Workforce and Learning Trends 2023 by CompTIA



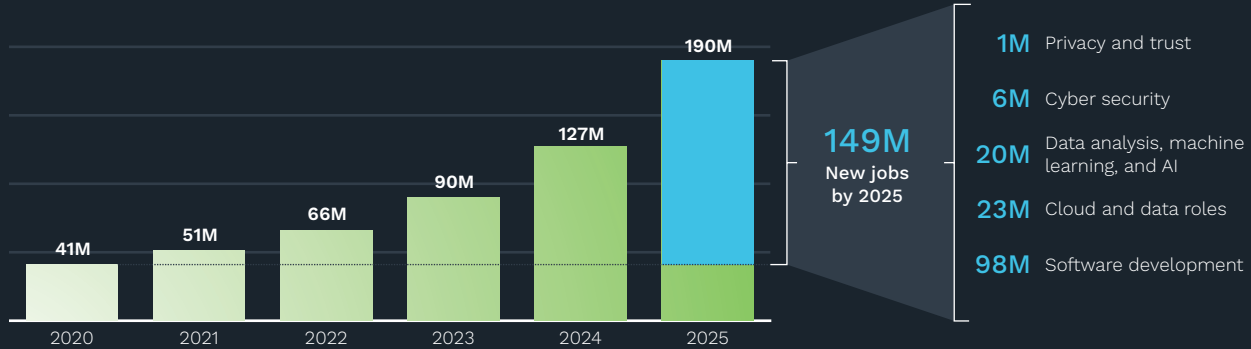
Read more: [What IT Professionals want from their jobs in 2024.](#)

An aspect of the Canadian tech market that will continue to make an impact into 2024 and beyond is the government programs trying to bring in IT talent from across the globe. In the summer of 2023, Canada's "New Tech Talent Strategy" was launched, opening new pipelines of talent for hiring managers. This program has already seen massive popularity, with its first prong, giving 10,000 United States H-1B visa holders a chance to gain a 3-year work permit and work for any Canadian company, filled up in only one day.

As this program continues to take effect, in addition to Canada's more welcoming immigration policies compared to other countries, the tech job market will see an influx of skilled workers, giving employers a larger candidate pool. With more than 32,000 global tech industry workers coming to Canada between April 2022 and March 2023, before the new initiatives started to take effect, hiring managers will be able to take advantage of the increase of quality IT workers.

## Great Lockdown Accelerates Transformation

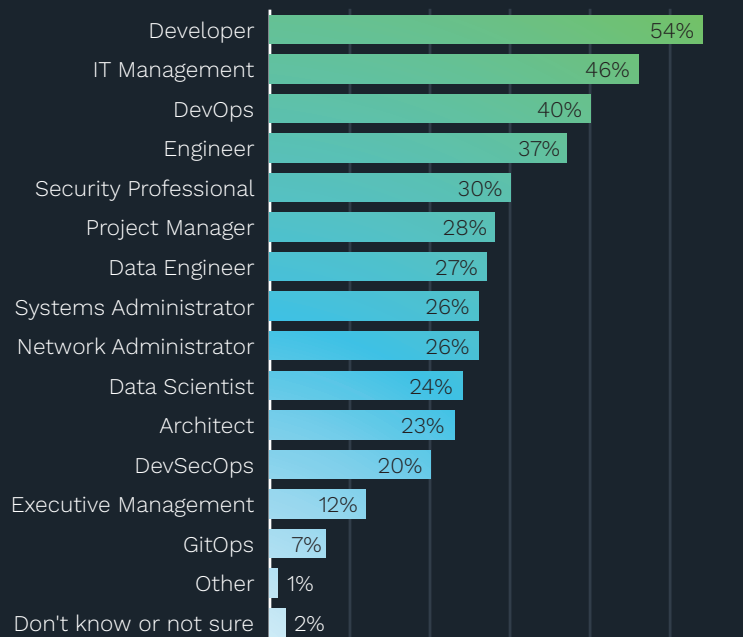
Source: Microsoft Data Science, "Digitization Capacity of the World Economy"



Overall, despite the concerns that flooded the start of 2023, the tech industry is still one of the best sectors to work in the Canadian economy. For those in the IT industry who are looking to find a role after being laid off or want to make the next steps in their careers, there are steps they can take to improve their candidacy during their search. Things like upskilling, seeing how new advancements in technologies (like artificial intelligence) are impacting your profession, and possibly compromising with employers when it comes to working from home.

## Developers and IT Managers Most Recruited Roles

Source: Linux Foundation: 2023 Tech Talent Survey



**70% of Canadian IT decision-makers, view a shortage of personnel with IT skills as one of the main threats to their business.**



In Office, Hybrid, Or Remote?

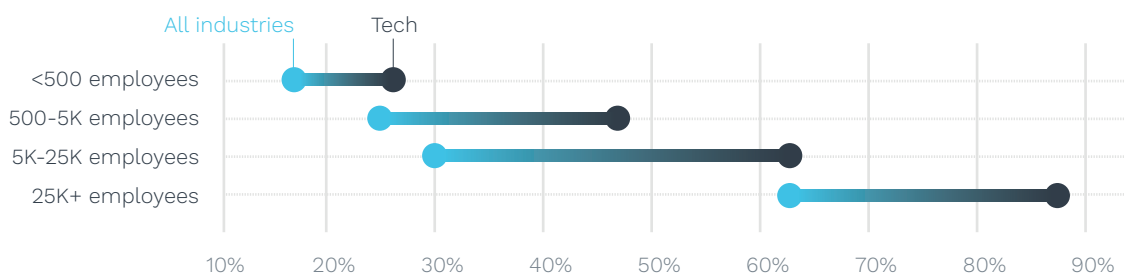
# The Workplace Debate Continues into 2024

## Workplace Environment

Since 2021, there has been a continuing debate on working from home versus a hybrid schedule versus full-time in the office. While the tech industry continues to be ahead of other sections of the economy in allowing workers to fully work from home, even in IT there has been a clawback from businesses wanting employees out of their homes and back into the office.

## Share of Companies That Allow Full Remote Work

Source: Flex Report: 2023 Tech Industry Deep Dive



That isn't to say that workers in tech are all heading back in. When looking at the number of Canadians who have any flexibility in their work arrangement, 59% are still fully remote. However, that number is down from 75% from last year.

**59% of Canadians are still fully remote. Read how flexible work options can attract more talent [here](#).**

It's also clear that Canadian workers vastly prefer a remote work environment as opposed to being back in the office, with 85% saying they would be interested in jobs that offer hybrid or fully remote working arrangements, and 43% said they have higher job satisfaction when they get to decide when and where they worked, even though they also stated they usually work longer hours versus being in the office.

As more employees are being forced back into the office, reactions have been mixed. Only 28% of workers said their company is making it worthwhile to come into the office, and that same survey showed that 62% of senior business leaders believe that there's a proximity bias between the in-person and remote/hybrid workforce.

That being said, **almost two-thirds of workers said they had more effective relationships with colleagues they've met face to face** as opposed to those who only met virtually. They also prefer collaborating in person as opposed to remotely by a 47 to 34 margin.

Out of those that do head into the office, a survey of not just Canadian, but North American tech workers shows that much of their workplace is still remote – 80% have not fully returned to office.

**43% said they have higher job satisfaction when they get to decide when and where they worked, even though they also stated they usually work longer hours versus being in the office.**

### How Much do Tech Workers Go In Office?

Source: LinkedIn survey data via Motion Recruitment



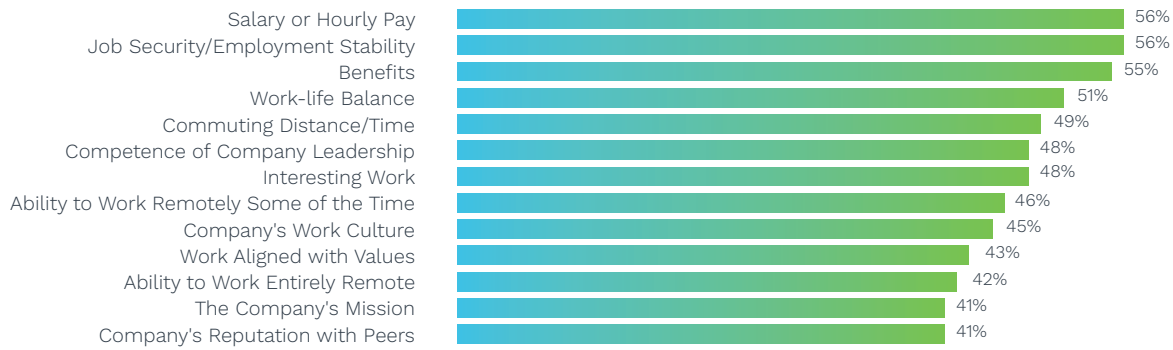
**How to attract talent in 2024: Flexibility.** Read more on how to build a flexible workplace for tech workers.



When talking to recruiters, one important issue that was brought up frequently was tech workers moving out of the cities and away from company offices when under the impression that full work from home would continue indefinitely. However, once demands for returning to the office were put into place, those who moved had an untenable commute. A Gallup survey found that 52% of those who prefer working remotely listed avoiding commuting time as a top reason they don't want to go into the office.

## What Tech Workers Consider Most Important in a New Role

Source: Morning Consult's "What Tech Workers Want to Do Next"

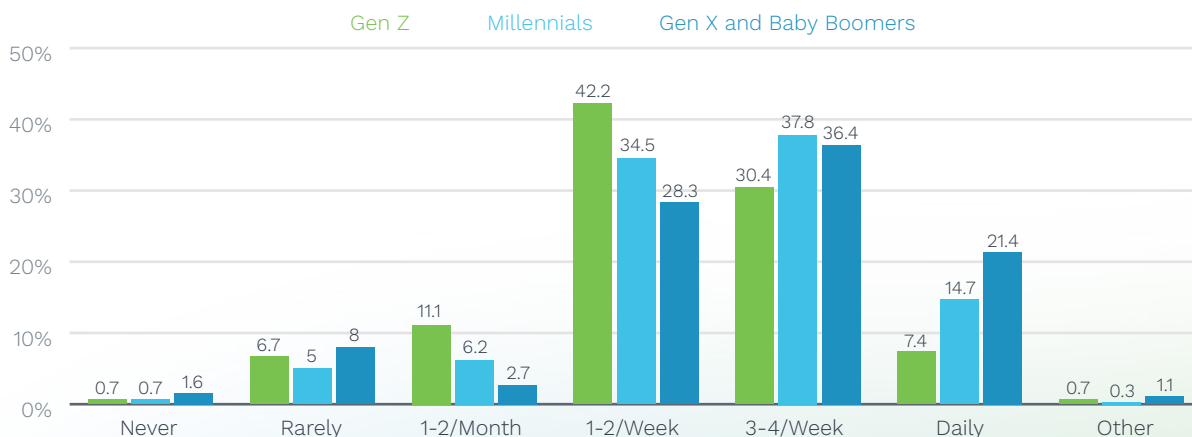


Where does that leave tech workers and companies? As one of our recruiters said, both sides need to be able to compromise, and that compromise seems to have landed on a hybrid schedule with expanded local hiring.

75% of all companies are allowing some sort of remote work with 2.2 days working remotely on average. It does appear that while most workers feel that 5 days in the office is a non-starter for a job and will not accept an offer if it is full-time in the office, many tech workers are becoming more accepting of the hybrid schedule. Interestingly, there is a noticeable difference between generations in their preferences of where they are working, with Gen Z mostly looking to be in the office multiple times a week, while Generation X and Baby Boomers are the age group most likely by far to want to work from home full time.

## How Often Workers Want to Work Remotely

Source: Hubble HQ's Future of Work Survey

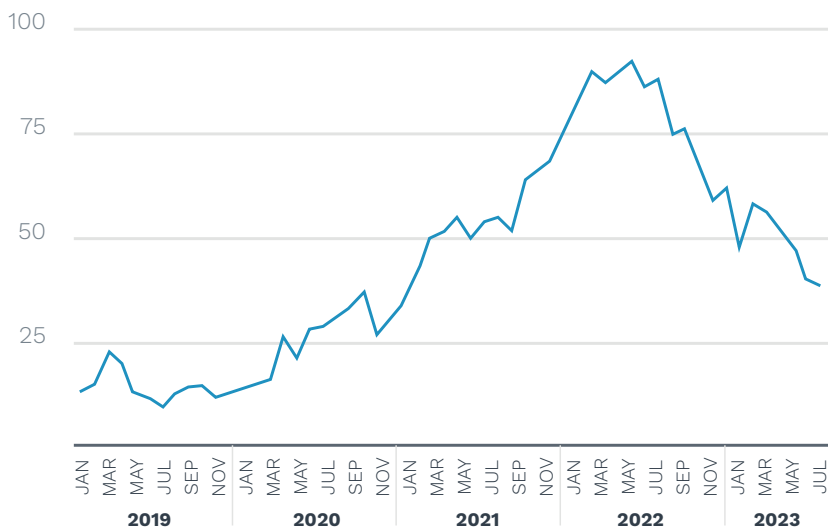


According to interviews with recruiters across the country, companies and hiring managers no longer want to do a nationwide search for most roles. They are willing to shrink the possible candidate pool to get candidates that are local to their office. Even if a role a company is hiring for can be done fully remotely, many are employing a 50 or 100-mile “bubble,” a topic discussed in last year’s guide. This hiring strategy allows for a worker to do their job completely from home but is available to head into the office as needed for major meetings and workshopping without major expenses such as flights and hotels.

For those who already live in a major hub like Toronto, the move back to the office can help those looking for a new position, as long as a job seeker is willing to go back into the office. By shrinking the candidate pool to only those local to offices, businesses are eliminating those across the rest of the country who might be willing to work for a lower pay rate, those who have the skills but have moved to a more rural area and can not make the daily commute, and those that flat out refuse to go back to the office.

### Remote and Hybrid Tech Job Postings

Source: CompTIA Tech Jobs Report + Analysis



How companies and managers can keep workers happy while being in the office is to make sure that there is an added benefit to being there. Tech workers forced into the office only to sit at a desk with headphones on will see no benefit of being in the office which could lead to them looking for new opportunities. When getting into the office leads to things like one-on-one time with managers to go over career goals and promotional paths, collaborations with team members that are difficult to do over Zoom calls or hands-on upskilling opportunities, then employees tend to look at heading to the office more favorably.

For both sides, the crux of the issue is continuing the conversation and making sure value is being added. For those looking to work from home full-time, productivity has to be maintained. Numerous studies have been launched attempting to measure if those who work from home are more or less productive than in the office, and results have been mixed. Success will come down to knowing how an employee will work best along with having a manager that knows how to get the best out of a worker, no matter where they are doing their job.

# Artificial Intelligence in 2024

## Will Tech's Next Big Thing Shake Up the IT Job Market?

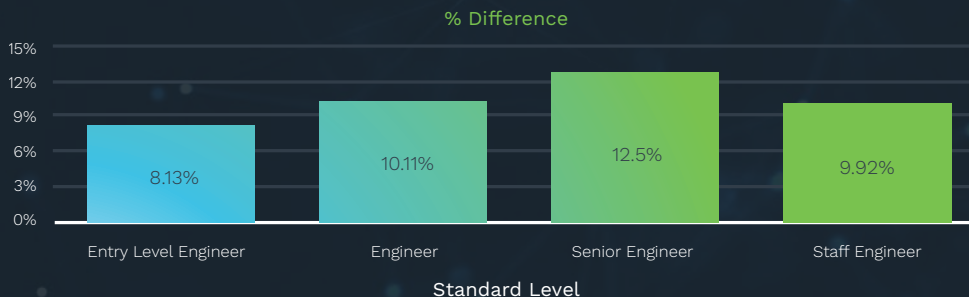
No topic has been more talked about in tech than the newest advancements in Artificial Intelligence and its potential impact not only on the tech job market but on the overall economy. Even though the technology has been around in some way for decades, search trends for the term "Artificial Intelligence" hit their all-time high in April 2023, and there continues to be interest from the average population that gives this technology more staying power in the general conversation versus other recent trends like cryptocurrencies and the metaverse.

While the debates will go on about how tools like ChatGPT might take over the world, when it comes specifically to the tech job market, there are both short-term and long-term plans businesses have when it comes to AI and Machine Learning technologies. 45% of tech leaders are saying that AI spending is a top priority for their company, and data center spending on AI processors will grow 4 times what it is now by 2025.

There is a massive amount of money currently being spent and made in the AI space across the entire economy, with companies like Netflix making news for offering jobs at over 900k/year USD for an AI-focused Product Manager. Inside the tech world, it's being shown that those who already have an AI skillset are getting a salary boost versus their peers with software engineers that are AI-focused seeing between an 8% to 12% compensation bump compared to their non-AI counterparts, depending on seniority.

### Compensation Increase For AI versus Non-AI Roles

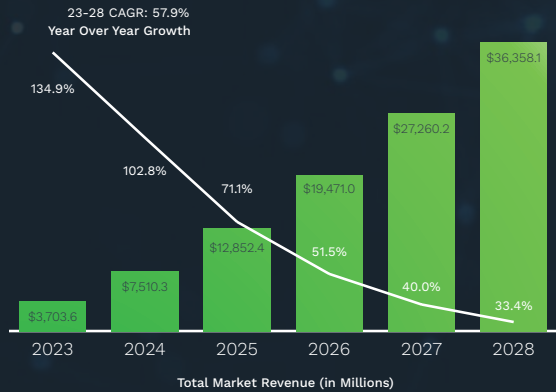
Source: levels.fyi



If you're looking for a job in AI or with AI, check out the open roles on our job board.

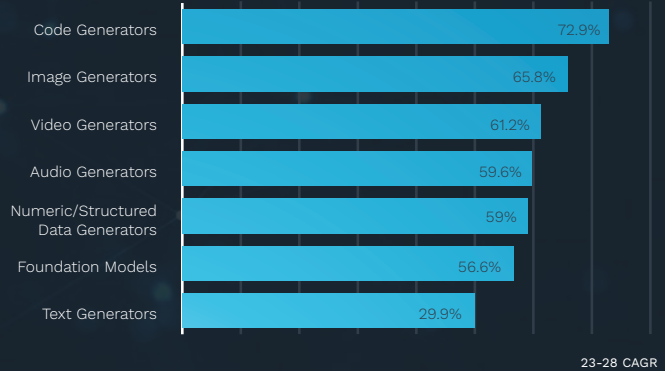
## Generative AI Market Revenue (\$M)

Source: S&P Global Market Intelligence



## Generative AI Growth by Segment

Source: S&P Global Market Intelligence

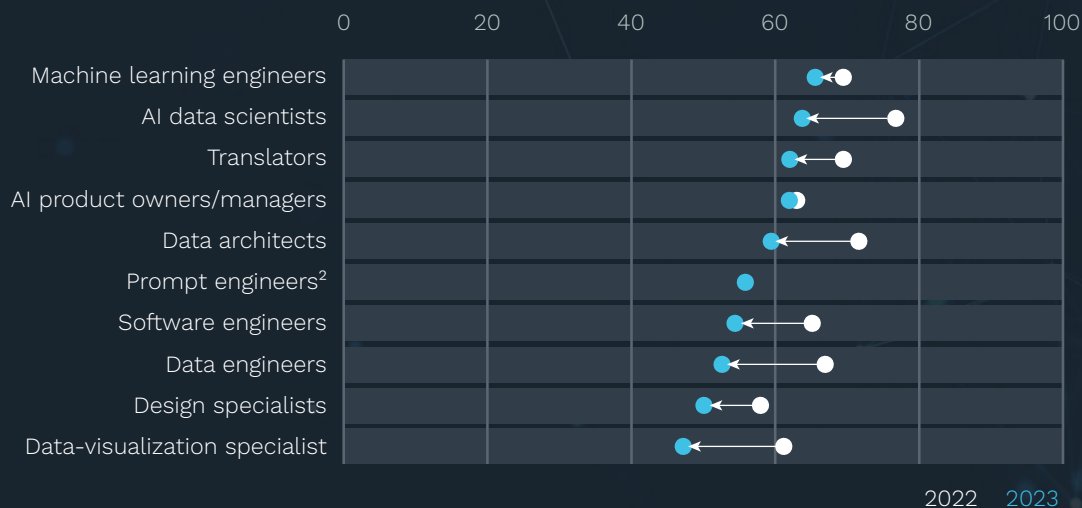


Tech workers are taking the hint, as while it is still a challenge for hiring managers and companies to find quality candidates for AI-related roles, it's become slightly easier year-over-year, with some roles being easier to find by over 10%.

## Hiring for AI-Related Roles

Source: McKinsey Global Survey on AI, 2023

Share of respondents reporting difficulty in organizations' hiring of AI-related roles<sup>1</sup> %



<sup>1</sup>Asked only respondents whose organizations have adopted AI in at least 1 function and who said their organization hired the given role in the past 12 months. Respondents who said "easy," "neither difficult nor easy," or "don't know" are not shown.

<sup>2</sup>Not asked of respondents in 2022.

While companies across the world are spending top dollar for IT workers who can create AI and ML tools that help computing and processing powers take giant leaps forward, others inside the industry have fears that these advancements will come at the expense of their jobs. A survey of tech professionals showed that over half (52%) are worried about losing their jobs due to automation or Artificial Intelligence, compared to only 26% disagreeing with the concern.

However, there have been many recent examples of companies attempting to use AI as an end-to-end solution that have ended up disastrously. Fully automated news articles riddled with factual errors and mistakes, thoroughly unhelpful chatbots, attorneys attempting to use generative text for briefs that are getting fined, with many other examples out there of AI failures.

**Read More: 8 Ways Artificial Intelligence will change the way software developers work.**



### Generative AI Related Risks

Source: McKinsey Global Survey on AI, 2023

Generative AI-related risks that organizations consider relevant and are working to mitigate, % of respondents<sup>1</sup>

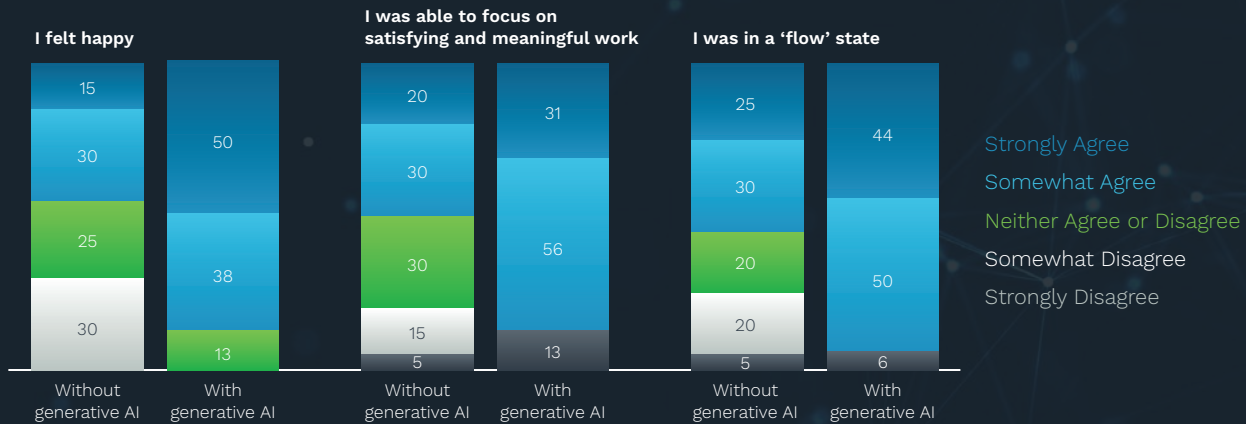


<sup>1</sup>Asked only respondents whose organizations have adopted AI in at least 1 function. For both risks considered relevant risks mitigated, n = 913.

What these AI tools can do as of the writing of this guide, is be a useful productivity tool that allows workers to blow past remedial tasks and focus on complex, more rewarding work. One study of developers after being introduced to an AI tool found that they produced 46% more code at a 55% faster rate. Most importantly, the developers said they were 75% more fulfilled in their work after using the AI tool.

## Generative AI Tools for Developer Experience

Source: McKinsey & Company



In reality, we are still at the beginning stages of this technology, and the final use cases of AI and machine learning vary wildly. There is the possibility that this tech will become a valuable productivity tool for many, but not the economy-altering revolution that some have predicted. However, there is an equal chance that this technology has the opportunity to fundamentally change how work gets done, both in the IT industry and beyond.

While we all wait and see where AI ends up, for those in the tech industry it would be wise to invest some time in seeing what AI tools are being implemented in your field and see if there is an opportunity to upskill so you can reap the financial as well as work fulfillment benefits of AI.

"Human intelligence needs to be part of the (software development) process to accomplish and present work to business partners and stakeholders.

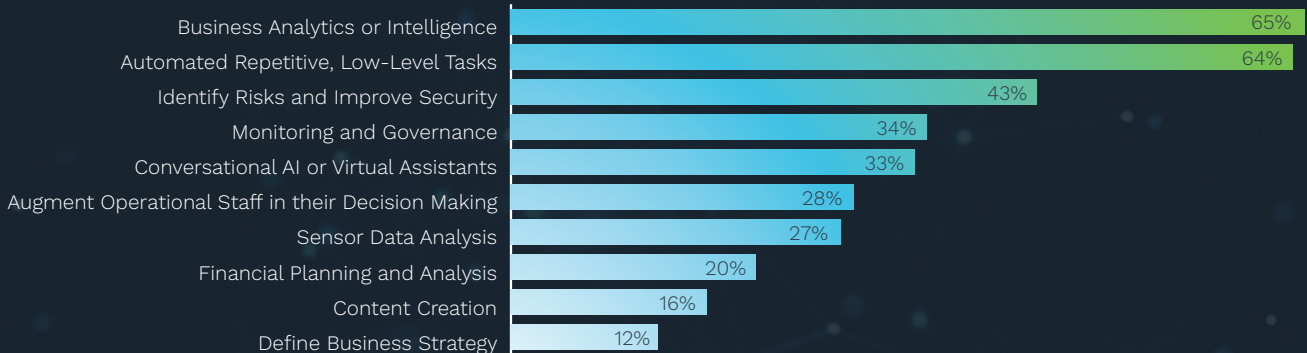
I strongly believe engineers are not replaceable. Generative AI will make the day-to-day work of engineers more fun and creative."

**Fouad Bousetouane**  
Director of ML, Grainger

**WATCH:** How AI is Transforming the Way Software Developers Work

## Roles Most Impacted by Use of AI

Source: Stanford University's 2023 Artificial Intelligence Index Report





# Advice from the Experts for 2024

## ○ For Both Hiring Managers and Tech Workers:

### Accept Compromise:

With where the industry seems to be headed going into 2024, we are at a point where neither hiring managers nor tech workers have the upper hand in the marketplace, and both need to find common ground so both can thrive in the years ahead.

For hiring managers, while demand for tech talent slightly lowered at the start of the year, it by no means subsided and has grown as 2023 has progressed. Because of this, attempting to lowball candidates, cut benefits or overwork employees once they arrive is a recipe for disaster.

For most tech workers, setting reasonable expectations for the salary range you're willing to accept will help you in your job search, along with working with managers on a flexible hybrid work environment that allows for occasionally coming into the office along with days working from home.

### Invest in AI:

Next-generation artificial intelligence tools appear to be here to stay, and both hiring managers and tech workers would be wise to find out how these exploding technologies are affecting their part of the IT economy.

Tech workers need to learn and understand the AI tools and programs that are being used currently in your area and see how you can implement them in your workflow. Even if the tools aren't ready for prime time and can only help in basic tasks, having a background in these AI programs could have lasting benefits long-term as the technology advances.

Hiring managers and companies should be looking to empower workers to upskill in these AI tools and possibly go beyond having workers use free, readily available tools like ChatGPT and invest in paid tools to help workers become more productive. While attempting to fully replace workers with AI tools in 2024 is probably a poor idea, spending money to help workers become more productive is always a good investment.

○ Read More: [Why IT Contracting Jobs are Becoming More Popular in Tech](#)



## ○ For Hiring Managers

### Unicorns Aren't Real, Don't Delay Hiring for One

While the market has softened slightly and salary demands are no longer rising at the rates they were in years past, it is still difficult to find tech talent in 2024. Many companies are probably looking for the exact same skills you are, so if you find someone who fits your company culture as well as the abilities you're looking for in a role, do not think you can prolong the hiring process or pay a candidate lower than what they are worth.

Our recruiters told us that on multiple occasions, a hiring manager was going through the interview process with a candidate they liked, however, they wanted to keep looking to find someone who was "perfect" and use the first as a backup option. Their unicorn didn't exist, and the first candidate was quickly picked up by a different business. Don't let perfection get in the way of success.

### Learn the Value of Inexperience

Relatedly, even a perfect candidate that checks all the boxes of what you're looking for and has all the skills you need for a role might not be all it cracks up to be. Our experts said that candidates who already have the skills needed to do their job well can end up being bored in the role quickly and might start looking for new challenges at a different job, sometimes within a year of being hired.

If instead you look to hire someone slightly more junior and inexperienced, but talented and driven for the role, not only could you hire at a lower salary, but the person in the role will feel challenged from day one on the job as well as more fulfilled and happier with the company when they grow into the position and expand their skill set.

## ○ For Tech Workers

### Understand Who You Are and the Value You Bring

It is true that if you are an "A"- level talent in this market, you can still pretty much pick your salary and working arrangements, within reason. However, those true elite workers are few and far between. For the rest of us, have an honest assessment of where your skills are compared to the rest of your peers.

If you set unrealistic expectations for what you're willing to accept in a new role, not only will you end up being disappointed with whatever role you end up in, but also miss out on great opportunities that were previously dismissed.

### Find Ways to Grow:

As one of our recruiters said, "In the tech industry, if you're not learning and growing, you're falling behind." It is vital for tech workers looking to take their careers to the next level to find ways to upskill and increase their value. That could be through opportunities your company offers, taking leadership courses or advanced degree classes part-time or utilizing the numerous freely available trainings online.

Have a conversation with your manager to see what skills the company is looking for, both in and out of your current role, and try and work towards filling that gap.

# Put Your 2024 in Motion

## Services & Opportunity

2024 promises to be one of the most exciting years to be a part of the IT industry, with new advancements in technologies seemingly happening every day, and businesses are now looking to grow rapidly after a brief period of stagnation. When figuring out what is best for your career or company, having experts on your side who can help you on your journey is vital.

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 job search in 2024 and beyond.

We hope that these insights and the following salary data help 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.**



# Tech Salary Ranges

This section outlines Canadian salary ranges by role in specifically Toronto. Find your tech sector and level on the following pages in Canadian dollars per position.

Mid: 2-5 Years of Experience/Abilities

Senior: 5+ Years of Experience/Abilities

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GET U.S. NATIONAL OR REMOTE SALARY DATA ON [MOTIONRECRUITMENT.COM](https://www.motionrecruitment.com).

## Toronto 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	\$210,647	\$326,452
VP of Engineering	\$186,860	\$242,343
Chief Technology Officer	\$181,402	\$222,519
Creative Director	\$145,173	\$215,387
Director of Engineering	\$168,601	\$206,841
Engineering Manager	\$151,993	\$194,791

### Top Jobs of 2023

Source: Indeed

Job Title	Percent Change in Job Share 2020-2023
Full Stack Developer	56%
Data Engineer	44%
Cloud Engineer	42%
Senior Product Manager	45%
Back End Developer	60%
Site Reliability Engineer	55%
Machine Learning Engineer	37%
Product Design	48%

In Indeed's "Top Jobs of 2023,"  
**8 out of the top 10**  
are tech positions.



**+13%**  
YEAR-OVER-YEAR

Canada's growth in the tech talent workforce outpaced the U.S., growing **15.7%, more than 150,000 jobs**, from 2020 to 2022, and job applications are still up **13% year-over-year** in Canada.

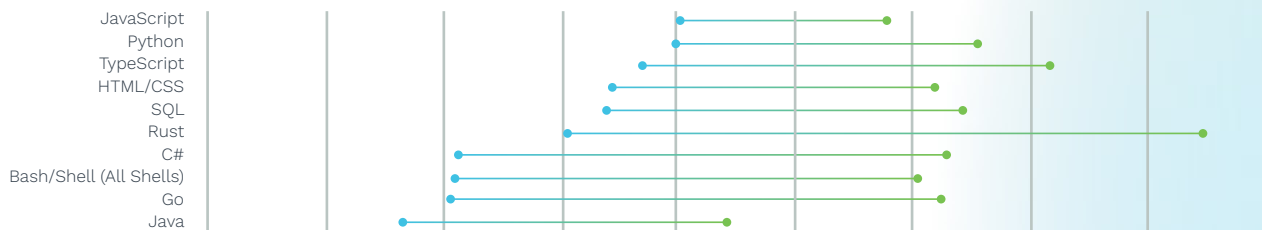
LinkedIn job posts that mention **artificial intelligence or generative AI** have see an extra **17% more applications** over the past two years compared to job posts with no mentions.

# Software Development

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
<b>Software</b>	<b>\$105,835</b>	<b>\$134,004</b>	<b>\$123,891</b>	<b>\$153,556</b>
<b>Back End</b>	<b>\$113,109</b>	<b>\$141,931</b>	<b>\$130,852</b>	<b>\$162,473</b>
.Net Architect			\$141,009	\$181,638
.Net Developer	\$91,202	\$116,124	\$112,397	\$139,496
Application Developer	\$91,775	\$116,249	\$114,719	\$133,839
BackEnd Developer	\$117,031	\$147,813	\$138,905	\$174,700
C++ Developer	\$119,977	\$161,371	\$137,472	\$181,638
Golang Developer	\$139,675	\$175,616	\$142,596	\$190,529
Java Architect			\$141,009	\$164,908
Java Developer	\$99,075	\$126,382	\$116,249	\$149,517
Microservices Engineer	\$114,719	\$133,839	\$137,663	\$155,062
Node.js Developer	\$121,315	\$140,148	\$128,667	\$163,188
PHP Developer	\$105,159	\$126,191	\$116,822	\$141,630
Platform Engineer	\$134,661	\$172,556	\$137,185	\$171,314
Python Developer	\$109,270	\$138,619	\$139,383	\$171,122
Ruby on Rails Developer	\$113,453	\$148,263	\$138,007	\$175,206

## Desired and Admired Programming, Script and Markup Languages

Source: Stack Overflow



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

Source: DevSkiller Digital & IT Skills Report 2023



1. Java 11	35.46%
2. Spring	30.42%
3. Spring Boot	17.28%
4. Maven	8.67%
5. JPA	8.16%



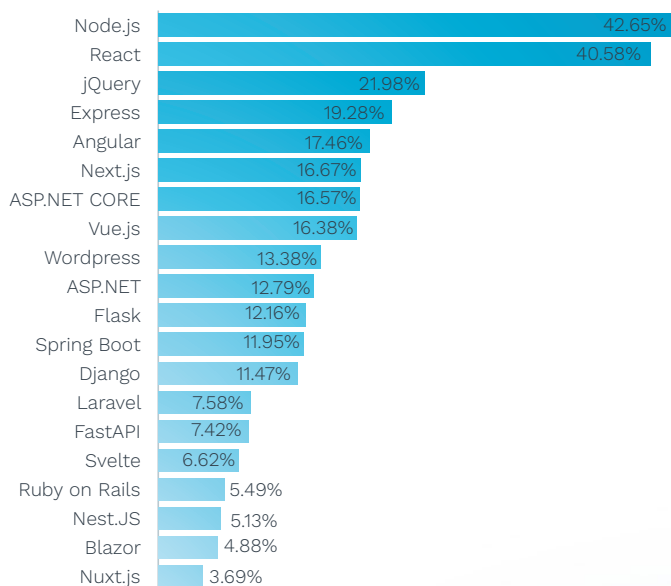
.NET/C#

1. .NET Framework	28.67%
2. ASP.NET	23.33%
3. .NET Core	19.5%
4. ASP.NET MVC	14.67%
5. .NET 5	13.83%

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
<b>Front End</b>	<b>\$108,176</b>	<b>\$136,421</b>	<b>\$116,396</b>	<b>\$156,351</b>
Angular Developer	\$102,700	\$128,540	\$112,174	\$152,572
Javascript Developer	\$108,615	\$137,680	\$119,619	\$158,240
React Developer	\$113,213	\$143,044	\$117,396	\$158,240
<b>General</b>	<b>\$107,305</b>	<b>\$137,027</b>	<b>\$131,931</b>	<b>\$156,481</b>
Full Stack Software Developer	\$118,352	\$145,119	\$137,320	\$158,387
Gaming Engineer	\$88,429	\$126,669	\$147,223	\$157,739
Robotics Engineer	\$121,028	\$160,893	\$119,499	\$152,959
Sales Engineer	\$113,094	\$145,502	\$124,279	\$154,871
Salesforce Developer	\$109,939	\$143,399		
Solutions Architect			\$144,035	\$172,630
Software Architect			\$149,135	\$179,248
Software Developer	\$94,965	\$127,158	\$117,009	\$148,530
Technical Writer	\$105,329	\$110,448	\$116,945	\$127,486
Control Systems Engineer	\$101,508	\$116,151	\$122,908	\$138,695
<b>Embedded</b>	<b>\$106,183</b>	<b>\$136,836</b>	<b>\$129,609</b>	<b>\$158,044</b>
Embedded Engineer	\$105,159	\$141,200	\$121,747	\$150,989
Firmware Engineer	\$107,207	\$132,473	\$137,472	\$165,100

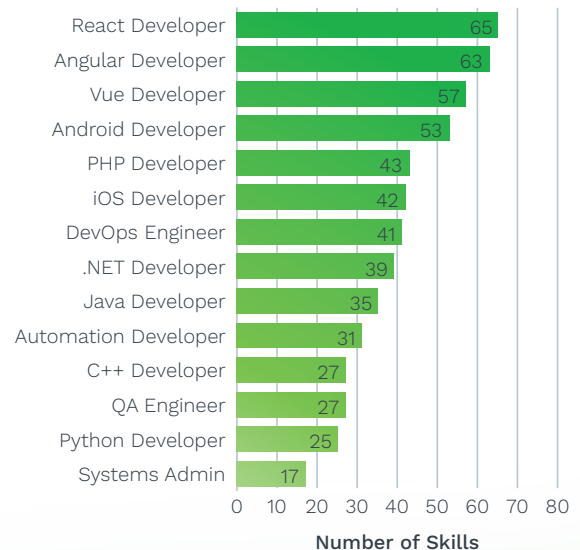
### Most Popular Web Frameworks & Tech

Source: Stack Overflow Developer Survey, 2023



### Skills Need Per Junior Developer Role

Source: DevSkiller's Digital & IT Skills Report 2023



## Product + UX, QA, Mobile

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
<b>Product &amp; UX</b>	<b>\$101,956</b>	<b>\$126,687</b>	<b>\$115,296</b>	<b>\$142,851</b>
Product Designer	\$107,843	\$134,092	\$121,536	\$150,787
Product Manager	\$109,435	\$135,651	\$121,129	\$151,550
UI/UX Designer	\$88,590	\$110,320	\$103,223	\$126,217

QA Automation Engineers saw a **10.6%** increase in salary on average YOY.

<b>QA</b>	<b>\$94,402</b>	<b>\$117,806</b>	<b>\$110,669</b>	<b>\$134,432</b>
QA Analyst	\$83,171	\$93,687	\$104,010	\$119,499
QA Automation Engineer	\$105,159	\$129,059	\$119,499	\$137,663
QA Engineer	\$84,658	\$107,134	\$101,086	\$127,607
SDET	\$104,621	\$141,343	\$118,082	\$152,959
<b>Mobile</b>	<b>\$135,192</b>	<b>\$168,631</b>	<b>\$153,661</b>	<b>\$195,312</b>
Android Developer	\$137,086	\$177,862	\$149,740	\$205,363
iOS Developer	\$126,317	\$158,570	\$156,549	\$193,932
React Native Developer	\$142,173	\$169,461	\$154,695	\$186,641
<b>Functional</b>	<b>\$92,005</b>	<b>\$109,313</b>	<b>\$107,604</b>	<b>\$127,919</b>
Business Intelligence Analyst	\$93,842	\$118,379	\$109,864	\$133,027
Business Analyst	\$74,285	\$93,638	\$83,543	\$104,142
Product Owner	\$96,989	\$123,311	\$134,278	\$157,930
Project Manager	\$96,927	\$116,292	\$98,628	\$131,504
Program Manager	\$107,537	\$117,515	\$130,282	\$143,638
Project Coordinator	\$82,453	\$86,743	\$89,030	\$97,272

### Top 6 Certifications for Product Development

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



## Data

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
<b>Data</b>	<b>\$112,797</b>	<b>\$141,611</b>	<b>\$139,853</b>	<b>\$170,814</b>
AI Engineer	\$106,386	\$148,813	\$141,534	\$195,989
Business Intelligence Developer	\$92,601	\$113,095	\$126,912	\$141,504
Computer Vision Engineer	\$126,377	\$167,693	\$150,680	\$191,996
Data Architect			\$163,743	\$218,122
Data Analyst	\$86,619	\$110,050	\$126,052	\$148,088
Data Engineer	\$123,957	\$155,644	\$139,048	\$169,022
Data Modeler	\$102,227	\$120,871	\$127,522	\$153,052
Data Scientist	\$121,333	\$166,638	\$141,931	\$176,372
Database Engineer	\$116,656	\$152,819	\$122,489	\$178,098
Machine Learning Engineer	\$121,737	\$163,607	\$153,816	\$190,663
Data Warehouse Analyst	\$119,470	\$138,493	\$144,684	\$154,873
Data Warehouse Developer	\$117,871	\$125,827	\$134,881	\$145,204
Database Administrator	\$118,334	\$135,778	\$144,797	\$157,604

### Top 6 AI Tools for Business Efficiency:

1. ThoughtSpot Sage
2. Chat GPT
3. Google Bard and Duet
4. Jasper
5. ChatSpot.ai by HubSpot
6. theGist

**Demand for Data and Machine Learning roles is increasing, with Data Scientist demand up by 21% and demand for ML Engineers up by 15% year-over-year heading into 2024.**

## 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>\$78,899</b>	<b>\$96,521</b>	<b>\$102,825</b>	<b>\$123,026</b>
Cloud Architect			\$129,592	\$160,638
Cloud Engineer	\$103,608	\$126,992	\$118,292	\$145,497
DevOps Architect/Coach			\$142,374	\$170,547
DevOps Engineer	\$114,724	\$140,806	\$115,501	\$152,265
Technical Support Analyst	\$56,103	\$69,273	\$70,349	\$78,042
Helpdesk Support	\$48,631	\$60,620	\$65,276	\$76,516
Infrastructure and Security Architect			\$126,431	\$143,289
IT Systems Analyst	\$70,239	\$89,442	\$88,155	\$100,100
Linux Administrator	\$76,870	\$89,176	\$94,823	\$113,451
Network Architect			\$120,110	\$153,825
Network Administrator	\$72,793	\$84,287	\$92,253	\$98,916
Network Engineer	\$86,156	\$103,032	\$102,016	\$121,344
Site Reliability Engineer	\$104,373	\$127,211	\$125,524	\$151,690
Support Engineer	\$60,205	\$83,445	\$75,016	\$91,030
Systems Architect			\$129,745	\$145,705
Systems Administrator	\$70,900	\$87,832	\$81,759	\$106,691
Systems Engineer	\$82,180	\$96,140	\$97,569	\$119,509

## Agile

	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
<b>Agile</b>	<b>\$125,491</b>	<b>\$133,321</b>	<b>\$141,791</b>	<b>\$156,840</b>
Agile Coach (Enterprise)	\$114,847	\$122,551	\$130,235	\$145,202
RTE/Release Train Engineer	\$150,499	\$159,506	\$169,789	\$181,312
Scrum Master	\$111,127	\$117,904	\$125,349	\$144,007

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

Source: Stack Overflow Developer Survey, 2023

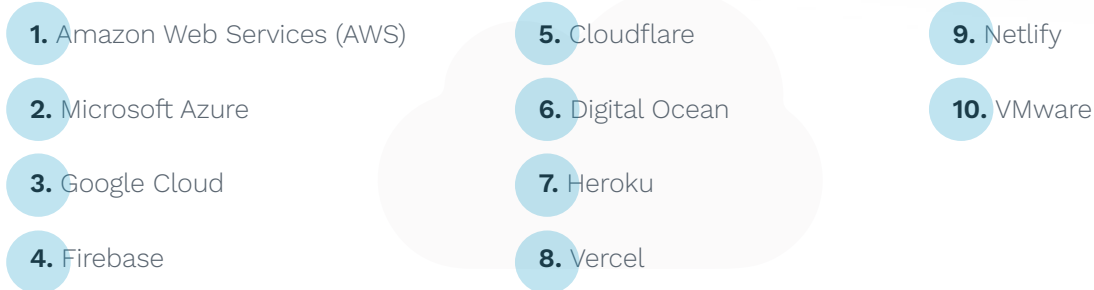
1. Zig	<b>\$103,611.00</b>	11. OCaml	<b>\$91,026.00</b>
2. Erlang	<b>\$99,492.00</b>	12. Objective-C	<b>\$90,000.00</b>
3. F#	<b>\$99,311.00</b>	13. Flow	<b>\$88,934.00</b>
4. Ruby	<b>\$98,522.00</b>	14. Rust	<b>\$87,012.00</b>
5. Clojure	<b>\$96,381.00</b>	15. Swift	<b>\$86,897.00</b>
6. Elixir	<b>\$96,381.00</b>	16. Groovy	<b>\$86,271.00</b>
7. Lisp	<b>\$96,381.00</b>	17. Bash/Shell (all shells)	<b>\$85,672.00</b>
8. Scala	<b>\$96,381.00</b>	18. Haskell	<b>\$85,672.00</b>
9. Perl	<b>\$94,540.00</b>	19. Apex	<b>\$81,552.00</b>
10. Go	<b>\$92,760.00</b>	20. PowerShell	<b>\$81,311.00</b>



# Cyber Security

## Top 10 Cloud Platforms, in Order:

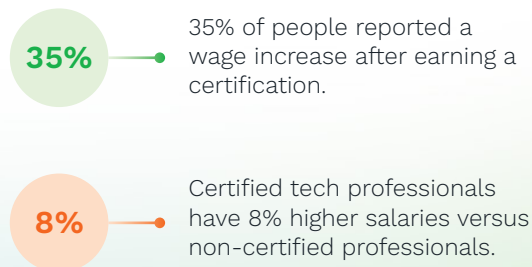
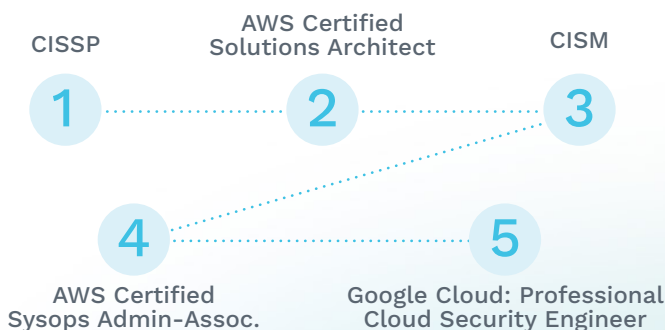
Source: Stack Overflow Developer Survey, 2023



	MID LEVEL		SENIOR LEVEL	
	LOW	HIGH	LOW	HIGH
<b>Security</b>	<b>\$115,501</b>	<b>\$139,323</b>	<b>\$132,013</b>	<b>\$161,737</b>
Cyber Security Architect			\$131,862	\$173,355
(Cyber) Security Engineer	\$132,216	\$149,419	\$142,071	\$172,159
Application Security Engineer	\$122,342	\$158,344	\$140,818	\$170,064
DevSecOps Engineer	\$135,763	\$166,628	\$149,232	\$190,036
Information Security Analyst	\$99,744	\$109,719	\$114,596	\$142,564
Information Security Engineer	\$115,274	\$142,385	\$134,071	\$157,919
Network Security Engineer	\$121,349	\$148,735	\$119,693	\$159,591
Security Architect			\$151,800	\$170,313
SOC (Security) Analyst	\$81,817	\$100,033	\$103,824	\$131,253
Pen Tester	\$117,698	\$154,604	\$126,675	\$174,552
Detection Engineer			\$129,668	\$229,412

## Adding Value: Certifications

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



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### 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 on methodology based on your specific needs.

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