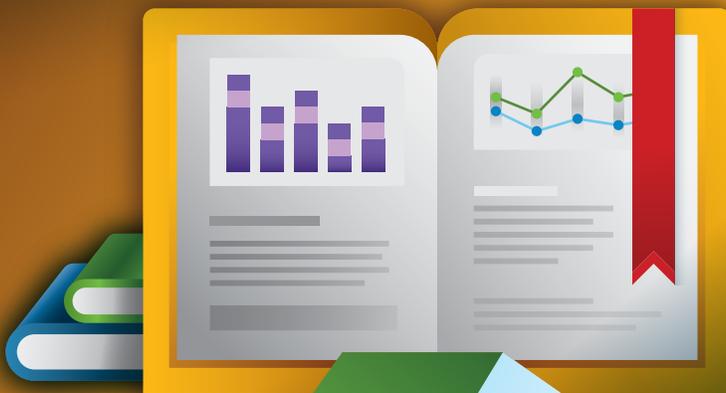


# Dice 2019 Tech Salary Report

Released January 29, 2019

**MIND THE GAP:** EMPLOYERS AND TECH PROFESSIONALS DIVIDED ON HOW TO SATISFY TOP TECH TALENT.



**Dice**<sup>®</sup>

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## **HOW MUCH ARE YOUR SKILLS WORTH?**

Get a personalized salary estimate based on your unique skill set, title, experience and location.

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# MIND THE GAP: EMPLOYERS AND TECH PROFESSIONALS DIVIDED ON HOW TO SATISFY TOP TECH TALENT

Dice's annual salary survey reveals non-salary options to improve recruitment efforts, increase retention and mitigate burnout.

Salaries for technology professionals in the United States were flat in 2018 with average annual salary of \$93,244, a slight 0.6% increase from 2017. The Dice 2019 Tech Salary Report mirrors static wages in technology across the U.S., but finds compelling options beyond pay for employers looking to impress top tech talent and attract skilled candidates.

In 2018, as with previous years, when asked why they'd anticipate changing employers, the vast majority of tech professionals (68% in 2018) said they'd change employers to receive higher compensation. While this sentiment continues to trump other satisfaction factors for tech professionals, it is also clear that they are seeking more than that coveted paycheck.

## REASONS FOR CHANGING EMPLOYERS



OF THE 45% OF TECH PROFESSIONALS THAT ANTICIPATE CHANGING EMPLOYERS IN 2019, HERE'S WHY:

**68%** Higher compensation  
AVERAGE SALARY \$80,925

**47%** Better working conditions  
AVERAGE SALARY \$84,516

**34%** More responsibility  
AVERAGE SALARY \$85,144

**22%** Anticipate losing current position  
AVERAGE SALARY \$100,675

**18%** Shorter commute  
AVERAGE SALARY \$83,751

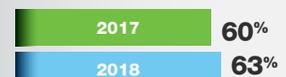
**13%** Relocation  
AVERAGE SALARY \$81,192

## SALARY SATISFACTION

SALARY SATISFACTION HAS BEEN DECLINING.



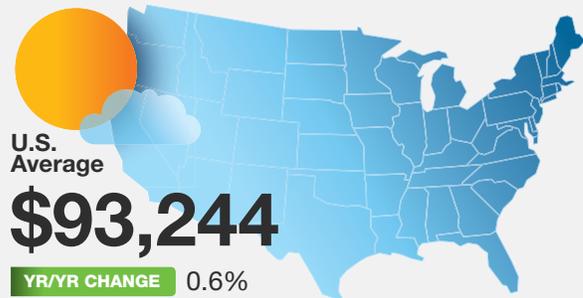
Confidence in finding a favorable new position in the next year has increased.



“Technology is an important driving force behind innovation and most every company will be a tech company at its core in the future. How we incentivize our tech talent will define our business success,” shared Art Zeile, CEO of DHI Group, Inc., parent company to Dice. “As it stands now, tech pros see a gap in the benefits and perks they want and need, compared to what they receive with their current employer. This dissonance must be shored up in order for top tech employers to remain competitive in a demanding market.”

47% of tech professionals said they’d change employers to seek better working conditions (non-compensation aspects like remote work, flex hours and culture), more responsibility (34%) and because they anticipate losing their current position (22%). The good news is, employers can mind the gap by offering non-salary options like training and education, flex and

## SALARY BY EMPLOYMENT TYPE



**Permanent**  
(Working Directly for Company)

**\$93,013**

**YR/YR CHANGE** N/A\*

**Contractor**  
(Employed by Staffing Agency)

**\$98,079**

**YR/YR CHANGE** N/A\*

**Contractor**  
(Working Directly for Employer)

**\$94,011**

**YR/YR CHANGE** N/A\*

\* Employment type categories were updated in the 2018 survey, therefore, yr/yr change is not available.

## TOP JOB TITLES BY SALARY

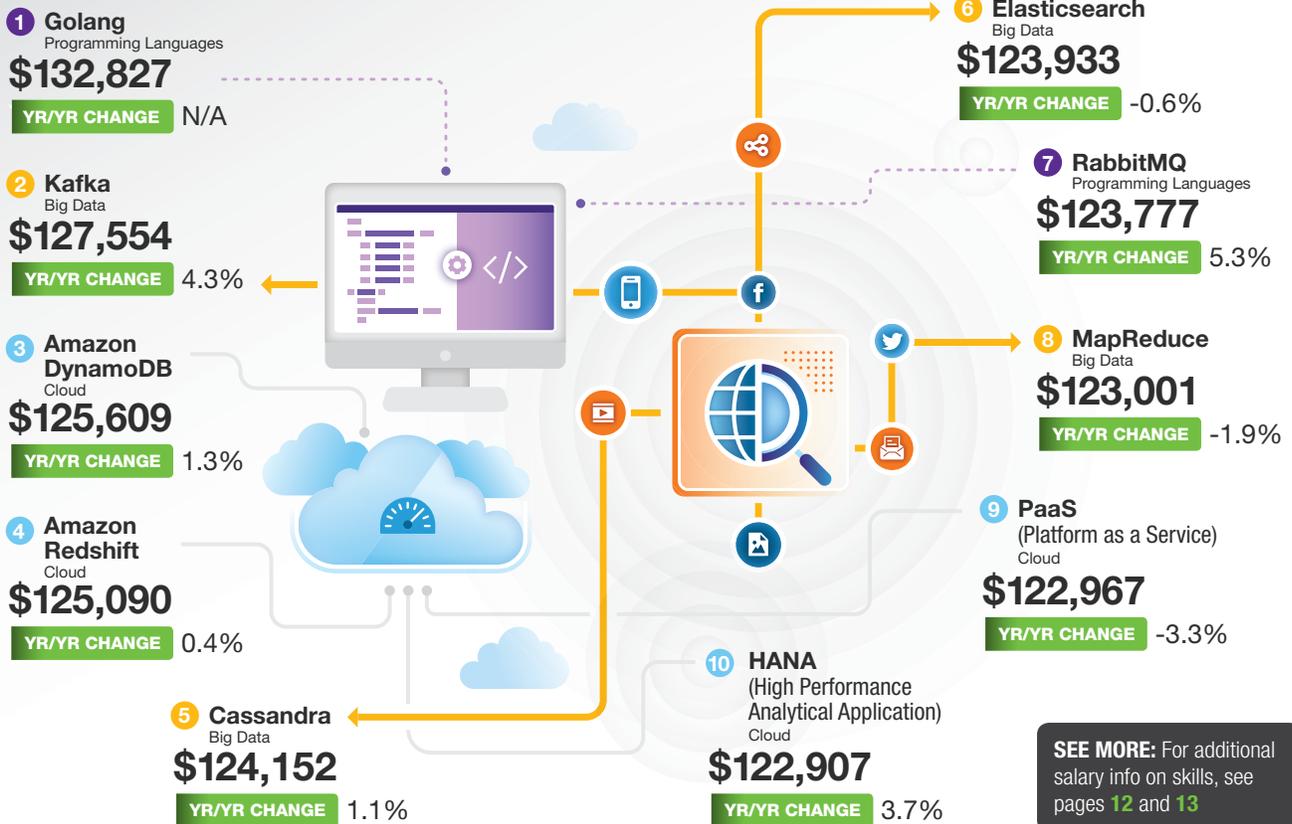
	JOB TITLE	2018	YR/YR CHANGE
1	<b>Tech Management</b> (CEO, CIO, CTO, VP, Dir.)	\$ 142,063	3.9%
2	<b>Systems Architect</b>	\$ 129,952	-3.8%
3	<b>Tech Management</b> (Strategist, Architect)	\$ 127,121	8.0%
4	<b>Product Manager</b>	\$ 114,174	-4.2%
5	<b>DevOps Engineer</b>	\$ 111,683	N/A
6	<b>Software Engineer</b>	\$ 110,989	5.1%
7	<b>Hardware Engineer</b>	\$ 110,972	N/A
8	<b>Project Manager</b>	\$ 110,925	-2.8%
9	<b>Security Engineer</b>	\$ 110,716	N/A
10	<b>Developer: Applications</b>	\$ 105,202	7.6%
11	<b>Security Analyst</b>	\$ 103,597	N/A
12	<b>Data Engineer</b>	\$ 103,596	N/A

	JOB TITLE	2018	YR/YR CHANGE
13	<b>Database Administrator</b>	\$ 103,473	0.2%
14	<b>QA Engineer</b>	\$ 96,762	5.2%
15	<b>Data Scientist</b>	\$ 95,404	N/A
16	<b>Business Analyst</b>	\$ 94,926	4.5%
17	<b>Programmer/Analyst</b>	\$ 91,404	8.7%
18	<b>Network Engineer</b>	\$ 88,280	2.6%
19	<b>Web Developer/Programmer</b>	\$ 82,765	11.6%
20	<b>Systems Administrator</b>	\$ 82,624	-0.5%
21	<b>QA Tester</b>	\$ 71,552	-1.2%
22	<b>Technical Support</b>	\$ 60,600	6.8%
23	<b>Desktop Support Specialist</b>	\$ 53,346	1.9%
24	<b>Help Desk</b>	\$ 45,709	5.5%
25	<b>PC/Service Technician</b>	\$ 41,310	N/A

## AVERAGE U.S. TECH SALARY 10-YEAR TREND

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>AVG. SALARY</b> \$78,845	<b>AVG. SALARY</b> \$79,384	<b>AVG. SALARY</b> \$81,327	<b>AVG. SALARY</b> \$85,619	<b>AVG. SALARY</b> \$87,526	<b>AVG. SALARY</b> \$88,479	<b>AVG. SALARY</b> \$93,328	<b>AVG. SALARY</b> \$92,081	<b>AVG. SALARY</b> \$92,712	<b>AVG. SALARY</b> \$93,244
<b>YR/YR CHANGE</b> 1.0%	<b>YR/YR CHANGE</b> 0.7%	<b>YR/YR CHANGE</b> 2.4%	<b>YR/YR CHANGE</b> 5.3%	<b>YR/YR CHANGE</b> 2.2%	<b>YR/YR CHANGE</b> 1.1%	<b>YR/YR CHANGE</b> 5.5%	<b>YR/YR CHANGE</b> -1.3%	<b>YR/YR CHANGE</b> 0.7%	<b>YR/YR CHANGE</b> 0.6%

## TOP 10 PAYING SKILLS



**SEE MORE:** For additional salary info on skills, see pages 12 and 13

## MIND THE GAP

THE LARGEST DISPARITIES IN BENEFITS TECH PROS FIND IMPORTANT VS. THOSE THEY CURRENTLY HAVE.



remote options and burnout mitigation in order to recruit and retain the most coveted tech professionals.

### Promote Training and Education

In 2018, 71% of tech professionals said that training and education are important to them, but only 40% currently have company-paid training and education – that’s a 31% gap between what’s desired and what’s offered. This gap is further illustrated by the fact that far more tech professionals (45%) who are satisfied with their job receive training, while only 28% of those who are dissatisfied with their job receive training. “Offering skill-enhancing training keeps employees at the top of their game and could ease the minds of professionals wanting to feel motivated and invested,” said Zeile.

### Be Flexible on Remote and Flex Options

In addition to training and education, tech professionals overwhelmingly noted remote and flexible working options as important (73%). In contrast, only 49%

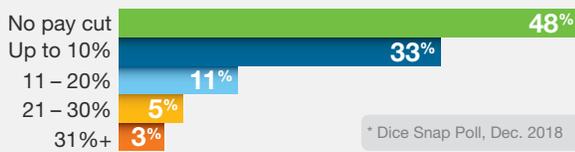
## WORKING REMOTELY

### HOW OFTEN WOULD YOU PREFER TO WORK REMOTELY VS. HOW OFTEN DO YOU CURRENTLY WORK REMOTELY?

	PREFER	CURRENTLY
Never	2%	23%
A few days a month	15%	26%
One day a week	19%	12%
Half of the time	20%	6%
More than half of the time, but not always	18%	6%
Always	21%	12%
Not sure/Not allowed at my company for my role	4%	17%

Percentages don't add up to 100% due to rounding

### HOW MUCH OF A PAY CUT WOULD YOU TAKE TO WORK REMOTELY MORE OFTEN?\*



\* Dice Snap Poll, Dec. 2018

currently have these options. This 24% gap is the second-largest between a desired benefit and what employers broadly are offering, which ties into overall employee satisfaction; 55% of people who said they're satisfied at their job have remote and flex options, whereas only 33% (who are said they're dissatisfied with their job) have the benefit.

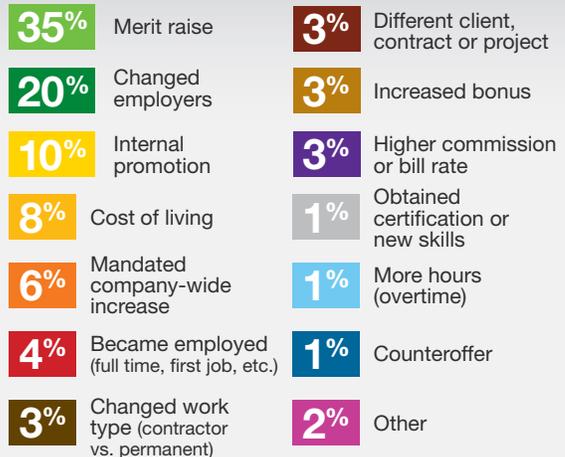
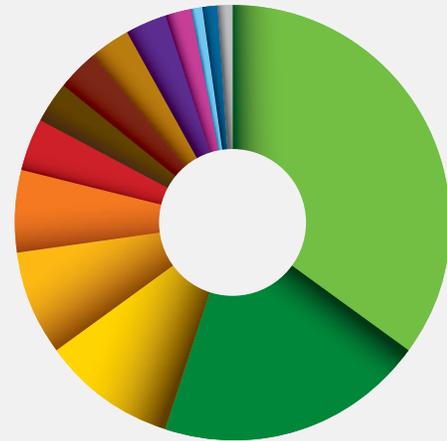
In terms of how often professionals want to work remotely, while 98% of Dice respondents said they'd prefer to work remotely at least some of the time, only 62% are currently offered this option by their employer. Employers who provide remote and flex options, even part of the time, have a better opportunity to stand out from competitors vying for the same tech talent.

### Mitigate Burnout

Lack of recognition (36%), workload (35%) and lack of challenge or monotony (28%) result in tech professional burnout. 81% of tech pros reported feeling burnt out in 2018, with a surprising 35% feeling the highest levels of burnout.

Those tech professionals who said they are dissatisfied with their jobs even more cite lack of recognition (39%) as the number one reason they're burnt out. Only

## REASONS FOR SALARY INCREASE



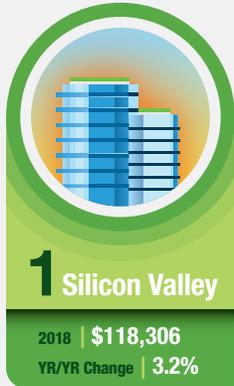
2% of overall respondents reported that high level recognition was a primary motivator provided by their employer in 2018, illustrating another gap opportunity for employers to close.

Another contributing factor to burnout is the desire for more responsibility and more interesting/challenging work. In fact, 34% of tech professionals said they'd change employers to receive more responsibility. Only 10% of respondents said they were provided more interesting/challenging work in 2018 as a primary motivator by their employer, which remains flat year/year.



Get a personalized salary estimate based on your unique skill set, title, experience and location at [dice.com/predictor](https://dice.com/predictor)

## TOP TECH METROS BY SALARY



METRO	2018	YR/YR CHANGE
6 D.C./Baltimore	\$101,235	1.3%
7 Portland	\$101,019	10.8%
8 New York	\$100,616	-3.2%
9 Tampa	\$ 96,777	11.8%
10 Denver	\$ 96,258	1.7%
11 Los Angeles	\$ 96,203	-3.0%
12 Philadelphia	\$ 93,340	-4.2%

METRO	2018	YR/YR CHANGE
13 Chicago	\$ 92,300	-0.8%
14 Phoenix	\$ 92,246	2.8%
15 Houston	\$ 91,591	1.5%
16 Austin	\$ 91,382	1.3%
17 Raleigh	\$ 91,103	5.2%
18 Charlotte	\$ 90,358	-2.3%
19 Dallas	\$ 89,779	-5.7%

METRO	2018	YR/YR CHANGE
20 Detroit	\$ 89,619	8.1%
21 Orlando	\$ 88,133	8.4%
22 St. Louis	\$ 86,206	6.4%
23 Atlanta	\$ 85,920	-7.3%
24 Miami	\$ 80,493	-6.7%

## TOP TECH METROS BY SALARY ADJUSTED FOR COST OF LIVING

WHERE DO TECH SALARIES GO THE FURTHEST? AVERAGE SALARIES ADJUSTED FOR LOCAL COST OF LIVING.



METRO	ADJUSTED SALARY
6 Phoenix	\$ 95,001
7 Raleigh	\$ 94,998
8 St. Louis	\$ 94,941
9 Detroit	\$ 93,451
10 Silicon Valley	\$ 93,081
11 Boston	\$ 92,805
12 Austin	\$ 91,382

METRO	ADJUSTED SALARY
13 Denver	\$ 90,809
14 Houston	\$ 90,148
15 Orlando	\$ 89,932
16 Dallas	\$ 89,600
17 San Diego	\$ 89,291
18 Atlanta	\$ 89,222
19 Chicago	\$ 88,921

METRO	ADJUSTED SALARY
20 Philadelphia	\$ 88,140
21 D.C./Baltimore	\$ 85,000
22 New York	\$ 82,472
23 Los Angeles	\$ 81,735
24 Miami	\$ 74,808

Cost of living adjustment data sourced from U.S. Bureau of Economic Analysis.

# IT'S NOT ONLY ABOUT MONEY

**70%** of tech professionals would take the same job with a different company for as little as a 15% salary increase. When considering employers, tech professionals should take into account programs that boost job satisfaction just as much as compensation.

## WHY TECH PROS WANT TO FIND A NEW JOB

Salary isn't the only reason tech professionals plan on changing jobs. Issues that impact job satisfaction and advancement opportunities come in second and third.

**68%**

SEEKING HIGHER SALARY

**47%**

SEEKING BETTER WORKING CONDITIONS

**34%**

SEEKING MORE RESPONSIBILITY

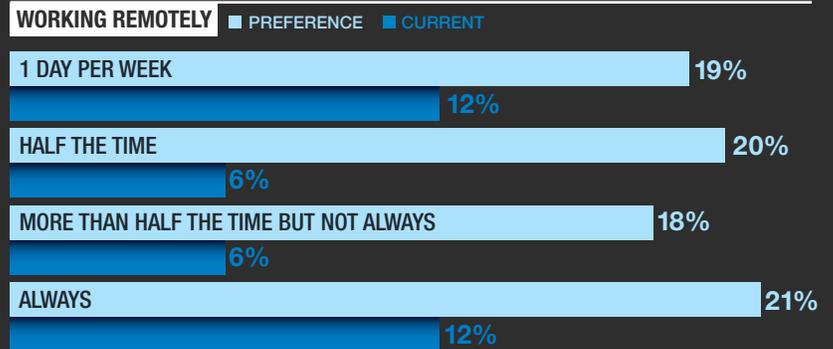
# BENEFITS AND BURNOUT

LOOK BEYOND SALARY WHEN CONSIDERING EMPLOYERS

## FLEX

**52%** of tech pros would take a pay cut to work remote more often.

**Tech professionals want more remote work opportunities.** Flexibility on remote work shows an employer's commitment to the well-being of its talent.



## TRAINING

**30%** of those without certifications say their employers don't pay or allow time for them.

**Tech professionals want to keep their skills fresh.** Employers that offer training and pay for certifications show their willingness to invest their tech staff.

**71%**

BELIEVE EDUCATION AND TRAINING BENEFITS ARE IMPORTANT

**40%**

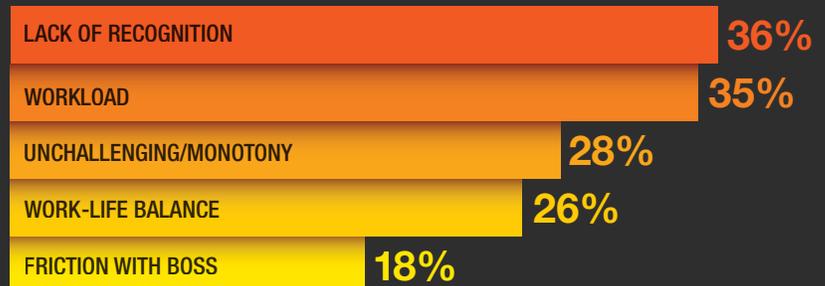
CURRENTLY RECEIVE EDUCATION AND TRAINING BENEFITS

## BURNOUT

**35%** of tech pros say they are very burnt out.

**Tech professionals are burnt out.** The best employers offer meaningful recognition, educational and remote work programs to help counter these top issues.

### WHY TECH PROS BURN OUT



# FOR TECH PROFESSIONALS, UPGRADING YOUR CAREER IS A CONVERSATION AWAY

What keeps technology professionals awake long into the night? Despite the tech industry's notably low unemployment rate, these pros fear their jobs being eliminated, according to the latest edition of the Dice Salary Survey.

Some 16% of respondents cited "position/contract elimination" as a top concern, followed by finding a new job that matched their skill-set (14%), and keeping their skills up-to-date (12%).

## MOTIVATORS

WHAT WAS THE PRIMARY MOTIVATOR YOUR EMPLOYER PROVIDED YOU IN 2018?



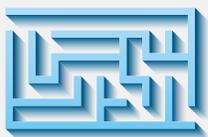
**17%** Increased compensation



**15%** Flexible work location/work remote



**10%** Flexible work hours



**10%** More interesting or challenging work



**4%** Promotion or new title

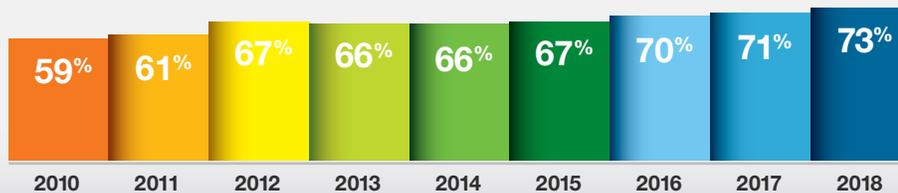


**3%** Training and certification courses



**2%** High-level recognition

PERCENTAGE OF EMPLOYERS PROVIDING MOTIVATORS TO RETAIN TALENT.



However intense those fears about losing their jobs or finding positions that match their skills, many tech professionals are interested in landing a new job. Of those who anticipate changing employers this year, some 68% said they would do so to secure higher compensation. Money wasn't the only motivator, though, as 47% said they wanted better working conditions, and 34% sought a higher degree of responsibility.

Indeed, those employees who exhibited a higher degree of satisfaction with their current position were also more likely to have access to training and education benefits. They also tended to have more options to work remotely or set a flexible schedule. It's not too much of a leap to assume that certain kinds of benefits lead to happier employees.

### Upgrading Your Professional Life

The scarcity of tech talent has created some issues for employers, especially when it comes to locking down highly specialized skills. Dice's database has shown that employers are willing to pay increasing amounts of money for those with in-demand skill-sets such as machine learning and IT security.

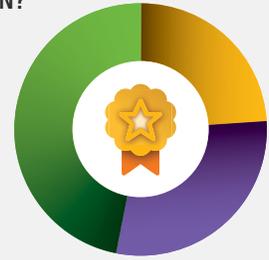
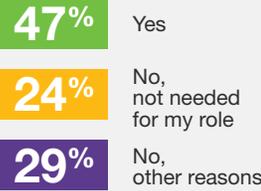
At the same time, not all employers have the cash to load up on lots of outside talent. While mega-firms such as Apple and Google have literally billions to spend on the world's best developers and researchers, smaller companies must stretch budgets in order to hire the tech professionals they need.

For tech professionals, this paradigm creates several opportunities. Although an employer might not prove very willing to offer a massive salary bump, they might prove more amenable to negotiating a flexible schedule, remote work opportunities or even a series of classes.

When it comes to education, tech professionals might need to work a bit to convince their employers to pay for classes and other training. Although 71% of employees rated training and education as "important," only 40% said they had access to those kinds of opportunities. That 31% gap between "importance" and access was larger than those for remote work and flexible schedules (24%), stock programs (also 2%), 401(k) opportunities (21%) and paid sick leave (16%).

## CERTIFICATIONS

### DO YOU HAVE A CERTIFICATION?



**NEARLY HALF OF TECH PROFESSIONALS HAVE A CERTIFICATION, BUT OF THOSE WHO DON'T, 30% CITE TIME CONSTRAINTS OR THAT THEIR EMPLOYER DOESN'T PAY FOR THEM.**

## SALARY BY AGE

	SALARY
<35	\$ 71,191
36-49	\$ 96,894
50+	\$104,117

### Certifications: Great for Many, But Not All

Not every employee necessarily needs or wants certifications, which are a key goal of many educational pathways. Over half of respondents told Dice they didn't have any certifications. Most of those without certifications (45%) said they were not needed for their role. Some 16% said they didn't think certifications would be valuable. But 15% said their company didn't pay for certifications, and 15% said they didn't have the time to earn one.

Looking at it from another perspective, though, a healthy percentage of employees are potentially open to earning certifications, provided their employers give them the necessary time and funding.

Based on the Salary Survey's data, it's clear that tech professionals want more than money; they want to keep their skills sharp, and their work-life balanced. Fortunately, the things that most concern employees are things that managers are often willing to negotiate over — provided employees ask for them.

## TOP-PAYING TECH SKILLS AND EXPERIENCE

SKILL	2018	YR/YR CHANGE
Golang	\$ 132,827	N/A
Kafka	\$ 127,554	4.3%
Amazon DynamoDB	\$ 125,609	1.3%
Amazon Redshift	\$ 125,090	0.4%
Cassandra	\$ 124,152	1.1%
Elasticsearch	\$ 123,933	-0.6%
RabbitMQ	\$ 123,777	5.3%
MapReduce	\$ 123,001	-1.9%
PaaS (Platform as a Service)	\$ 122,967	-3.3%
HANA (High Performance Analytical Application)	\$ 122,907	3.7%
Cloudera	\$ 122,753	-1.2%
Amazon Redis	\$ 122,592	4.4%
NoSQL	\$ 122,504	5.8%
Solr	\$ 122,447	2.7%
SOA (Service Oriented Architecture)	\$ 122,312	-0.7%
CMMI	\$ 120,946	-2.4%
HBBase	\$ 120,823	2.3%
Artificial Intelligence	\$ 120,709	N/A
Containers	\$ 120,311	N/A
Amazon Route 53	\$ 120,091	1.0%
Zookeeper	\$ 120,007	3.6%
Hadoop	\$ 119,864	1.1%
JUnit	\$ 118,956	5.0%
Gradle	\$ 118,819	7.6%
JDBC (Java Database Connectivity)	\$ 118,694	2.3%
Docker	\$ 118,651	2.4%
SOX (Sarbanes Oxley)	\$ 118,543	-1.0%
Mockito	\$ 118,198	5.9%
PMBok (Project Management Body of Knowledge)	\$ 118,165	-3.3%
Vagrant	\$ 118,144	6.5%
Puppet	\$ 117,632	9.1%
Informatica	\$ 117,411	0.8%
Hive	\$ 117,363	1.1%
Cloud Foundry	\$ 117,224	-3.2%
Jenkins	\$ 117,160	3.7%
RDBMS (Relational Database Management System)	\$ 116,910	6.7%
Big Data	\$ 116,093	0.2%
Teradata	\$ 115,752	4.5%
Sybase	\$ 115,642	-1.3%
Postgres	\$ 115,615	5.5%
XSLT (Extensible Stylesheet Language Transformations)	\$ 115,327	2.4%
Kanban	\$ 115,239	1.2%
Confluence	\$ 115,142	4.3%
EMC Documentum	\$ 115,120	-3.4%
IaaS (Infrastructure as a Service)	\$ 114,884	-6.3%
ISO 27000	\$ 114,832	-7.1%
TOAD (Tool for Application Development)	\$ 114,742	4.5%
Korn Shell	\$ 114,718	0.3%
Ansible	\$ 114,431	4.1%
JBoss	\$ 114,380	2.6%
Waterfall	\$ 114,300	0.4%
REST (Representational State Transfer)	\$ 114,136	4.4%

SKILL	2018	YR/YR CHANGE
JDE (JD Edwards)	\$ 114,002	4.9%
Change Management	\$ 113,925	1.5%
Scrum	\$ 113,699	2.2%
Splunk	\$ 113,690	-0.8%
Rally	\$ 113,543	2.2%
Amazon CloudFront	\$ 113,459	-0.8%
Spark	\$ 113,291	-1.1%
ETL (Extract, Transform and Load)	\$ 113,259	0.1%
Machine Learning	\$ 113,093	N/A
Groovy	\$ 113,009	1.9%
ETL Testing	\$ 112,750	0.3%
JMeter	\$ 112,740	3.6%
SDLC (System Development Life Cycle)	\$ 112,732	-0.4%
Mongo DB	\$ 112,572	4.6%
FCoE (Fibre Channel Over Ethernet)	\$ 112,527	0.8%
Jetty	\$ 112,507	-5.6%
LoadRunner Tutorial	\$ 112,397	-4.7%
Amazon S3/AWS (Simple Cloud Storage Service)	\$ 112,354	1.6%
NUnit	\$ 112,344	N/A
Lean	\$ 112,277	-1.8%
NumPy	\$ 112,181	6.3%
JIRA	\$ 111,781	2.9%
MicroStrategy	\$ 111,577	-4.3%
UML (Unified Modeling Language)	\$ 111,501	-2.0%
JAX-RS (Java API RestFUL Services)	\$ 111,447	-2.8%
Oozie	\$ 111,353	-0.5%
OpenStack	\$ 111,232	-3.9%
Pure Storage	\$ 111,171	-8.7%
Agile	\$ 111,131	1.6%
Tomcat	\$ 111,116	1.0%
Balsamiq	\$ 110,900	0.6%
Weblogic	\$ 110,828	-1.0%
Nginx	\$ 110,793	1.7%
Perl	\$ 110,678	-2.7%
Chef	\$ 110,599	-3.1%
Angular	\$ 110,505	7.1%
Load Balancers	\$ 110,395	-1.2%
Business Intelligence	\$ 110,249	2.2%
Solaris	\$ 110,127	-4.5%
Hibernate	\$ 109,872	0.3%
Spring Framework	\$ 109,701	N/A
MariaDB	\$ 109,672	7.3%
Shell	\$ 109,518	4.0%
GIT	\$ 109,484	N/A
EMC	\$ 109,419	-4.2%
Cognos	\$ 109,419	-1.0%
Agile Testing	\$ 109,415	2.7%
SOAP	\$ 109,389	1.4%
Websphere	\$ 109,389	0.0%
Selenium	\$ 109,210	4.5%
SoapUI	\$ 109,123	3.4%
Oracle eBusiness	\$ 108,986	1.1%

SKILL	2018	YR/YR CHANGE
ERP	\$ 108,924	0.0%
Cucumber	\$ 108,773	3.2%
Cloud Computing	\$ 108,449	-2.1%
Fibre Channel	\$ 108,412	-3.1%
ITIL (Information Technology Infrastructure Library)	\$ 108,388	-1.1%
JSON	\$ 108,379	4.2%
JSP (JavaServer Pages)	\$ 108,304	0.8%
Data Warehouse	\$ 108,270	-0.9%
Disaster Recovery	\$ 108,239	-0.2%
SaaS (Software as a Service)	\$ 108,165	0.4%
BASH (Bourne Again Shell)	\$ 108,034	1.7%
R	\$ 107,873	1.8%
XAML (eXtensible Application Markup Language)	\$ 107,842	2.2%
SSIS (SQL Server Integration Services)	\$ 107,805	N/A
AIX (Advanced Interactive eXecutive)	\$ 107,666	-4.4%
Lucidchart	\$ 107,578	4.3%
NetApp	\$ 107,408	-5.7%
Microsoft Team Foundation Server	\$ 107,308	3.7%
Omnigraffle	\$ 107,061	-12.1%
WCF (Windows Communication Foundation)	\$ 106,798	-0.8%
Tableau	\$ 106,737	-0.5%
DB2	\$ 106,599	0.1%
Hitachi	\$ 106,421	-6.4%
BABOK (Business Analysis Body of Knowledge)	\$ 106,281	0.3%
Data Science	\$ 106,008	-2.1%
MPLS (Multi Protocol Label Switching)	\$ 105,863	-1.4%
HL7 (Health Level 7)	\$ 105,829	0.0%
Six Sigma	\$ 105,794	-1.5%
Oracle DB	\$ 105,747	-0.8%
Linux	\$ 105,568	2.7%
PCI (Payment Card Industry)	\$ 105,479	-4.8%
Node.js	\$ 105,418	3.7%
Unix	\$ 105,267	-0.5%
ALM/Quality Center (Application Lifecycle Mgmt.)	\$ 105,217	-2.6%
Java/J2EE	\$ 105,164	2.6%
Rackspace	\$ 104,782	-7.1%
XML (eXtensible Markup Language)	\$ 104,713	1.6%
Blockchain	\$ 104,634	N/A
SAN (Storage Area Network)	\$ 104,509	0.0%
EDI (Electronic Data Interchange)	\$ 104,463	-6.6%
Fortran	\$ 104,430	-7.4%
ReactJS	\$ 104,418	N/A
Azure	\$ 104,349	-1.8%
C	\$ 104,247	-3.0%
3Par	\$ 104,121	-9.3%
Test Management	\$ 104,045	-3.4%
IIS (Internet Information Systems)	\$ 104,032	2.3%
SDN (Software Defined Network)	\$ 103,947	-9.6%
Informix	\$ 103,844	-10.7%
Apache Web Server	\$ 103,826	0.4%
TypeScript	\$ 103,680	1.7%
Python	\$ 103,587	0.4%
Augmented Reality	\$ 103,551	N/A
Visio	\$ 103,531	-1.3%

SKILL	2018	YR/YR CHANGE
Workday	\$ 103,322	-2.1%
Siebel	\$ 103,301	-5.1%
BugZilla	\$ 103,160	-5.1%
SQLite	\$ 103,153	3.7%
T-SQL (Transact SQL)	\$ 103,090	0.1%
Unified Communication	\$ 103,046	-5.3%
Manual Testing	\$ 103,039	0.2%
z/OS	\$ 103,005	-1.2%
ServiceNow	\$ 102,960	N/A
Virtualization	\$ 102,818	-1.2%
Compellent	\$ 102,616	-6.2%
Ajax	\$ 102,554	2.2%
BMC Remedy	\$ 102,353	0.3%
Matlab	\$ 102,198	6.7%
Tivoli	\$ 102,172	-3.9%
QA (Quality Assurance)	\$ 102,088	-0.2%
Ruby	\$ 102,086	-1.2%
Database Testing	\$ 102,013	-3.6%
VMWare ESXi (Elastic Sky X Integrated)	\$ 102,006	1.3%
Data Analysis	\$ 101,989	-0.2%
Telepresence	\$ 101,823	-1.6%
Swift	\$ 101,631	3.2%
Wan Opt	\$ 101,622	-3.6%
MS SQL	\$ 101,614	0.1%
C#	\$ 101,566	1.8%
Glassfish	\$ 101,538	-5.2%
Salesforce.com	\$ 101,499	-1.5%
SAP	\$ 101,388	-4.6%
Heroku	\$ 101,376	7.8%
SQL	\$ 101,120	1.3%
CPOE (Computerized Physician Order Entry)	\$ 100,816	N/A
Sun	\$ 100,745	-8.6%
Juniper	\$ 100,697	1.0%
Objective-C	\$ 100,684	-7.5%
Box	\$ 100,669	3.0%
QTP (QuickTest Professional)	\$ 100,631	-3.1%
NAS (Network-Attached Storage)	\$ 100,608	0.3%
HIPAA (Health Insurance Portability and Accountability Act)	\$ 100,539	1.2%
Snagit	\$ 100,325	0.0%
CRM (Customer Relationship Management)	\$ 100,317	-2.8%
VBA (Visual Basic for Applications)	\$ 100,233	2.5%
vCloud	\$ 100,218	-2.9%
Web App Firewall	\$ 100,078	-1.4%
MySQL	\$ 100,040	1.1%
HP ALM (Application Lifecycle Management)	\$ 99,996	-0.1%
SQL Server	\$ 99,768	1.0%
Cyber Security	\$ 99,746	0.9%
KVM (Kernel-based Virtual Machine)	\$ 99,711	-4.0%
Metro Ethernet	\$ 99,675	-1.8%
FreeBSD	\$ 99,665	-3.3%
Mobile Testing	\$ 99,498	2.4%
IBM Mainframe	\$ 99,449	-4.9%
Infosphere Data Stage	\$ 99,424	-8.7%
VSAM (Virtual Storage Access Method)	\$ 99,215	-9.3%

NOTE: Several new tech skills were added to the 2018 survey, therefore, yr/yr change is not available.



**TOP INDUSTRIES BY SALARY**

**\$100,000+**



**Aerospace & Defense**  
**\$109,698**  
 YR/YR CHANGE:  
 5.4%



**Utilities/Energy**  
**\$106,780**  
 YR/YR CHANGE:  
 6.1%



**Bank/Financial/Insurance**  
**\$105,170**  
 YR/YR CHANGE:  
 -3.1%



**Entertainment Media**  
**\$103,608**  
 YR/YR CHANGE:  
 9.6%



**Computer Software**  
**\$102,739**  
 YR/YR CHANGE:  
 5.9%



**Medical/Pharmaceutical  
/Biotechnology**  
**\$100,539**  
 YR/YR CHANGE:  
 0.0%

**\$90,000+**



**Professional Services**  
**\$99,466**  
 YR/YR CHANGE:  
 -0.3%



**Telecommunications**  
**\$97,702**  
 YR/YR CHANGE:  
 2.5%



**Computer Hardware**  
**\$96,309**  
 YR/YR CHANGE:  
 0.0%



**Government**  
**\$92,135**  
 YR/YR CHANGE:  
 -1.3%



**Manufacturing**  
**\$91,634**  
 YR/YR CHANGE:  
 1.3%



**Healthcare Providers**  
**\$91,562**  
 YR/YR CHANGE:  
 3.6%



**Consumer Products**  
**\$88,476**  
 YR/YR CHANGE:  
 -7.3%



**Internet Services**  
**\$88,238**  
 YR/YR CHANGE:  
 -2.3%



**Retail/  
E-Commerce**  
**\$80,580**  
 YR/YR CHANGE:  
 -4.4%



**Marketing/  
Advertising**  
**\$80,320**  
 YR/YR CHANGE:  
 -3.8%



**Transportation/  
Logistics**  
**\$78,162**  
 YR/YR CHANGE:  
 -9.6%



**Distributor/  
Wholesale**  
**\$76,716**  
 YR/YR CHANGE:  
 -4.2%



**Construction/  
Home Building**  
**\$74,547**  
 YR/YR CHANGE:  
 N/A



**Hospitality/  
Travel**  
**\$73,859**  
 YR/YR CHANGE:  
 -9.2%



**Non-Profit**  
**\$71,911**  
 YR/YR CHANGE:  
 -3.1%



**Education**  
**\$68,586**  
 YR/YR CHANGE:  
 -2.2%

**\$80,000+**

**\$70,000+**

**\$60,000+**

## SALARY BY STATE

STATE	2018	YR/YR CHANGE									
AL*	\$ 86,071	12.8%	IL	\$ 92,447	1.4%	MT*	\$ 69,582	-8.8%	RI*	\$ 78,285	5.4%
AK*	\$160,528	71.1%	IN	\$ 83,773	9.8%	NE*	\$ 82,284	-6.5%	SC	\$ 85,306	6.6%
AZ	\$ 90,704	0.1%	IA*	\$ 78,483	-10.0%	NV*	\$ 96,225	24.3%	SD*	\$ 62,544	20.5%
AR*	\$ 78,504	-8.2%	KS*	\$ 80,187	-3.2%	NH*	\$106,357	19.3%	TN	\$ 89,722	13.1%
CA	\$105,953	1.4%	KY*	\$ 77,490	-4.0%	NJ	\$101,459	2.9%	TX	\$ 89,277	-1.4%
CO	\$ 95,543	1.0%	LA*	\$ 82,203	2.3%	NM*	\$ 92,905	0.2%	UT	\$ 82,323	-5.4%
CT	\$ 89,796	-9.1%	ME*	\$ 67,907	-12.1%	NY	\$ 98,219	-6.6%	VT*	\$ 82,616	0.4%
DE*	\$ 86,838	-22.6%	MD	\$ 94,015	-5.5%	NC	\$ 89,555	5.6%	VA	\$101,935	4.4%
DC	\$102,394	7.2%	MA	\$103,260	-2.6%	ND*	\$ 84,909	7.3%	WA	\$101,704	4.0%
FL	\$ 86,139	3.9%	MI	\$ 84,642	5.8%	OH	\$ 80,723	-3.2%	WV*	\$ 61,834	-9.3%
GA	\$ 84,471	-5.8%	MN	\$ 99,191	3.3%	OK*	\$ 75,429	-5.9%	WI	\$ 82,025	-7.6%
HI*	\$ 76,784	-4.7%	MS*	\$ 67,645	7.7%	OR	\$ 96,928	6.5%	WY*	\$113,746	46.2%
ID*	\$ 92,544	4.5%	MO	\$ 81,060	-1.6%	PA	\$ 89,721	0.6%			

\* Sample size less than 100 respondents, therefore, not statistically valid, but presented for continuity purposes only.

## SALARY BY LEVEL

	SALARY
Head of a Department	\$ 121,324
Manager of a Group of Teams	\$ 120,190
Team Lead	\$ 103,708
Member of a Team	\$ 81,771
Work Independently	\$ 83,184

## SALARY BY EXPERIENCE

YEARS	SALARY	YR/YR CHANGE
Under 1	\$ 57,541	2.7%
1-2	\$ 58,755	2.5%
3-5	\$ 69,671	2.3%
6-10	\$ 82,094	-0.4%
11-15	\$ 96,421	-0.1%
Over 15	\$ 113,503	1.1%

## Dice Salary Survey Methodology

The Dice salary survey was administered online by Dice.com, with 10,780 employed technology professionals responding between October 22, 2018 and December 13, 2018. Respondents were invited to participate in the survey in several ways: 1) via an email invitation to Dice's registered database members, 2) through a notification on the Dice.com website pages and/or via site intercept invitations within the site to visitors and 3) via banner ads on the Dice.com site. A cookie methodology was used to ensure that there was no duplication of responses between or within the various sample groups, and duplicate responses from a single email address were removed. Technology professionals earning salaries of \$350,000 and above were not automatically eliminated from the survey if they met other criteria.

## About Dice

Dice is a leading tech career hub connecting employers with skilled technology professionals and providing tech professionals with career opportunities, data, insights and advice. Established in 1990, Dice began as one of the first career sites and today provides a comprehensive suite of recruiting solutions, empowering companies and recruiters to make informed hiring decisions. Dice serves multiple markets throughout North America. [www.dice.com](http://www.dice.com) Dice is a DHI Group, Inc. (NYSE:DHX) service.