### 'decide,

## 2019 SALARY SURVEY Attract and Retain Top Tech Talent





**Released December 2018** 

## **ABOUT THIS SURVEY**

Our Clients at Decide Consulting are always requesting current salary information for different technology skill sets. We have put together this salary survey to satisfy that need.

Decide Consulting has conducted **a survey** with our vendors and combined the results with data from the **U.S. Bureau of Labor Statistics** to produce this data.

We Have Used Data in Over

## **130 DIFFERENT JOB TITLES**



## HOW TO USE THIS GUIDE

For IT Workers, you must understand where your technological skills currently are and where your future interests may be. Then ask yourself "Does my current company value these skills? Do they offer training for where I want to go? Does this company offer an environment to get there?" This guide may help you answer these questions.

For IT employers, you must understand the value of the technology. How important is this technology to the company revenue? Can better use of the technology increase revenues? There are many companies that answer "yes" to both. They use guides like this one to make sure they attract and keep the top talent.

### INCREASED DEMAND FOR IT & TECH TALENT



Each year, the Bureau of Labor Statistics estimates the number of jobs to be added for the next few years. This includes software, IT, accounting and many other fields. Their forward-looking predictions are based on the actual jobs that exist today. In 2006, they had no estimates for how many mobile developers there would be in 2016. The job did not exist yet. Think about all the technologies that are still far away from their tipping points – Blockchain, IoT, Machine Learning, Deep Learning, mobilizing web-based software. The BLS does not have the data to estimate job growth for those fields. This is why we are seeing IT jobs as such a bog component of the US Job growth.



THE US ADDED 489,000 IT JOBS MAY 17 4,646,000 0CT 18 5,135,000

THE REST OF THE US ECONOMY ADDED 3,030,000 JOBS IN THE SAME PERIOD.

**1 IN EVERY** 

**7 JOBS ADDED** 

IN THE US CAME FROM IT

FROM MAY '17

THROUGH OCT '18,

## WHAT IS GOING TO MAKE IT and Technology Jobs Grow?

#### HERE ARE SEVERAL FACTORS THAT WILL CAUSE THE NUMBER OF TECHNOLOGY AN IT JOBS TO GROW IN 2019:

Al and machine Learning are creeping into business. More businesses did the equivalent of a "Hello World" Al/ML application in 2018. 2019 will build on that.

Manufacturing devices and sensors with embedded code. Think the Internet-of-Things for a smart manufacturing line.

More legacy web-based software is just now becoming available en-masse as mobile applications.

While home assistants have evolved, they are still in version 1.0. Echo, Google Home and Jibo are very early intheir life cycle. Think about what the first iPhone had available for it. Wait until thesoftware developers start building apps for the home assistants.

Big Data is still in its infancy. Companies are early in their adoption of Big Data. More MBAprograms are offering degrees in data analytics. Quora, Panera, Facebook, Under Armour and Orbitz all had security breaches. These big names will motivate smaller organizations to take notice and evaluate their own security issues.

For every device included in the IoT, there is code running behind the scenes.

Everything previously mentioned has to have security encoded. The people who specialize in writing software forbusiness functionality are not the same ones who write software for security needs.

The BLS does their forecast based on past data. Many of the jobs created in the next 10 years will be based onhardware and technology devices currently in its infancy or does not exist yet. For example, we have not founddata about Machine Learning jobs from the Bureau of Labor Statistics.

IT IS A VERY GOOD TIME TO WORK IN IT AND TECHNOLOGY!

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#### WHY DOES IT AND TECH TALENT COST SO MUCH:

The demand for good tech talent is increasing dramatically because of new technology. This demand has a downstream impact. Understand the new technologies coming in, you then understand the demand for technical talent. Think about the technologies that are still early in their life cycles for business: IoT, Artificial Intelligence, Machine Learning, Big Data, cybersecurity & cloud services. The demand for these technologies if claiming the cream of the technological crop. Salaries for these skill sets are increasing dramatically. Think about golf. When Tiger Woods first started playing, the prize amounts went up. That had a downstream impact. Every other golfer participated in a larger pool of money.

#### FIND TEAM PLAYERS:

Team players are better than lone wolfs when it comes to software development. No one individual will be able to code, test, release, prototype, etc. We need teams of people to get this done. Good team players make an organization better. Bad team members can cost thousands, if not millions, of dollars. This makes it important to realize which software developers are good team players and which ones need more coaching. Here are 4 questions to help identify team players. The good ones give answers making reference to teams. The bad ones complain.

- Tell me about a time a specification package was incorrect.
- Tell me about a time you dealt with a company-specific procedure for check-in, code review, release, etc.
- How long do you work a problem before asking for help?
- Tell me about a time when a bug was not actually a bug



#### **7 QUESTIONS** To improve your Chances of getting An offer

- Why did you take the Job Here?
- What do the Most Successful People Here Do?
- What is the Background of Star Performers?
- Do You Have Any Hesitations about Me?
- What are the Must-Have Attributes?
- What are the Current Opportunities the Company Has?
- What are the Next Steps?

#### **SKILLS IN DEMAND FOR 2019**

Cybersecurity - CISSP, CEH, and Comp TIA, Red Team, Blue Team Big Data – R, Hadoop, NoSQL, QlikView, Tableau, Spark Full Stack Developers - Node, is (front and back), C#, .NET Core, Xamarin, Typescript, React, Python Cloud Services – AWS, ITSM, I&O, OpenStack, Azure Agile – SAFe, CSM, ICP-ACC DevOps – Git, Jenkins, Docker, Puppet, Kubernetes Data Analytics – Regression Analysis, Python, R, MATLAB, SQL

# **BE FLEXIBLE**

If there is not some flexibility in your company's HR package, your competitor will have some in theirs. Companies with the more flexible and employee-centric packages will attract the top talent.

At Decide Consulting, our key employees do not track their time off. They are judged by their ultimate performance. If they are selling, recruiting or making clients happy, all while helping make the company profitable, we do not care how many Fridays you take off.



*"Great vision without great people is irrelevant."* – Jim Collins, Good to Great



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# TALK IT OUT

Regardless of what your company is doing, if you are not communicating to the top talent you have, someone else will. Find out what their goals are, what they want to do. Perhaps even modify some of your company or department goals or priorities when you can find overlap.





### QUALITY TECH TALENT WILL NOT AROUND AT THE END OF A LONG INTERVIEW PROCESS.

#### They took another offer.

While companies need to accurately evaluate technical skills and emulate

work, they cannot take forever to do so. There is too much demand for good tech talent. Having an interview process that takes longer than 15 calendar days from resume review to offer-made, means you will have offers declined because the candidates took something else. The companies that react quickly to identify and retain quality tech talent, will be the winners in the battle for

tech skills.



## FREELANCE TALENT ON THE RISE.

Research from The Plato Group reveals that 33% of Americans, about 42 million, are freelancing. Experts' forecasts predict that freelancers will make up nearly 50% of the full-time workforce by the end of 2027. Hiring IT freelancers has become a norm because it offers some distinct and unique benefits.

"The key for us, number one, has always been hiring very smart people."

- Bill Gates, Microsoft

experts' forecasts predict that freelancers will make up nearly 50% of the full-time workforce by the end of 2027.

N2027



**50%** 

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#### THESE ARE A COUPLE OF SITUATIONS WHEN YOU ARE *better off hiring an IT freelancer* INSTEAD OF A PERMANENT EMPLOYEE:

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#### **Overhead Reduction**

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Full Time employees real cost can often be 1.5x their salary. When you factor in PTO, training, career planning and the potential unemployment cost, FTEs can get expensive. Freelancers you pay to do something very specific and nothing else.

#### Specialty Skills

If you need to use a new skill set (e.g. developing a mobile application when you have previously only been web-based), use freelance talent to help you architect quickly based on their past projects and not have your own team start at ground zero.

In 2017, 33% of Americans about 42 million, are freelancing



## HOT INDUSTRIES FOR TECH IN **2018**

Expect these sectors to lead IT hiring activity in the year ahead:



## HEALTHCARE

Healthcare has been lagging behind in IT for years. Walmart has better predictors about when you will buy a lawnmower than Healthcare has about when people get cancer. Big Data analysis is beginning to creep into Healthcare. EMR/EHR companies will continue to mobilize their products.

# OIL & GAS

After several years of lackluster oil prices, Oil & Gas will begin to stabilize and see renewed IT investment. Many IT initiatives that have been shelved since 2014, will see the light and be updated in 2018.



# FINANCIAL SERVICES



Big data and information security concerns are creating need for technology professionals in this vertical. Security Developers who understand oWASP principles are in big demand.

## MANUFACTURING

No sector can benefit from the IoT more than manufacturing. Manufacturing jobs may have gone down, but manufacturing output has increased and will continue to do so. Plants that used to employ 500 people now create more output with 50 people. Behind the efficiency are robotics, software and IoT enabled sensors.





### **NATIONNIDE** WE HAVE USED DATA IN OVER *130+ Different Job Titles* AND HAVE CREATED THESE NATIONAL AVERAGES.

	NATIONWIDE			TEXAS			
	LOW	MEDIUM	HIGH	LOW	MEDIUM	HIGH	
CX, UI AND UX							
CX LEAD	\$79,811	\$90,232	\$140,813	\$85,398	\$96,548	\$150,670	
CX DESIGNER	\$88,707	\$102,433	\$139,034	\$94,917	\$109,603	\$148,766	
UX LEAD	\$64,560	\$74,982	\$125,562	\$69,080	\$80,230	\$134,352	
SENIOR UX DESIGNER	\$73,457	\$87,182	\$123,783	\$78,599	\$93,285	\$132,448	
UX DESIGNER	\$63,290	\$77,015	\$103,449	\$67,720	\$82,406	\$110,691	
SENIOR UX RESEARCHER	\$76,761	\$87,182	\$137,763	\$82,134	\$93,285	\$147,406	
UX RESEARCHER	\$85,657	\$99,382	\$135,984	\$91,653	\$106,339	\$145,502	
SENIOR FRONT END DEVELOPER	\$84,386	\$100,145	\$141,830	\$90,293	\$107,155	\$151,758	
FRONT END DEVELOPER	\$64,560	\$74,982	\$125,562	\$69,080	\$80,230	\$134,352	
CMS ADMINISTRATOR / DEVELOPER	\$69,644	\$82,607	\$116,666	\$74,519	\$88,389	\$124,833	
SENIOR WEB DEVELOPER	\$101,416	\$120,225	\$169,789	\$108,515	\$128,641	\$181,674	
SENIOR E-COMMERCE DEVELOPER	\$84,640	\$100,145	\$141,321	\$90,565	\$107,155	\$151,214	
E-COMMERCE DEVELOPER	\$74,473	\$89,978	\$110,820	\$79,686	\$96,276	\$118,578	
DIGITAL AND GRAPHIC DESIGN							
CREATIVE DIRECTOR	\$95,316	\$112,854	\$159,622	\$101,988	\$120,753	\$170,795	
DESIGN DIRECTOR	\$79,303	\$93,791	\$132,425	\$84,854	\$100,356	\$141,695	
SENIOR DIGITAL DESIGNER	\$55,410	\$65,831	\$93,282	\$59,289	\$70,440	\$99,812	
DIGITAL DESIGNER	\$43,210	\$53,631	\$81,082	\$46,234	\$57,385	\$86,758	
SENIOR ART DIRECTOR	\$55,410	\$65,831	\$93,282	\$59,289	\$70,440	\$99,812	



	NATIONWIDE			TEXAS		
	LOW	MEDIUM	HIGH	LOW	MEDIUM	HIGH
ART DIRECTOR	\$43,210	\$53,631	\$81,082	\$46,234	\$57,385	\$86,758
SENIOR GRAPHIC DESIGNER	\$48,293	\$58,714	\$86,165	\$51,674	\$62,824	\$92,197
GRAPHIC DESIGNER	\$41,176	\$51,598	\$79,048	\$44,059	\$55,209	\$84,582
TRAFFIC MANAGER	\$48,293	\$58,714	\$86,165	\$51,674	\$62,824	\$92,197
DIRECTOR / MANAGEMENT						
CHIEF INFORMATION OFFICER (CIO)	\$173,856	\$206,390	\$292,301	\$186,026	\$220,837	\$312,762
CHIEF TECHNOLOGY OFFICER (CTO)	\$148,438	\$178,939	\$253,158	\$158,829	\$191,465	\$270,879
CHIEF SECURITY OFFICER	\$146,913	\$174,110	\$246,296	\$157,197	\$186,298	\$263,537
VICE PRESIDENT - IT	\$139,034	\$165,468	\$234,604	\$148,767	\$177,051	\$251,026
DIRECTOR OF TECHNOLOGY	\$120,225	\$142,846	\$202,577	\$128,641	\$152,846	\$216,758
PROJECT MANAGEMENT / TEAM LEADS						
SCRUM MASTER	\$95,316	\$112,854	\$159,622	\$101,988	\$120,753	\$170,795
TECHNICAL LEAD	\$79,303	\$93,791	\$132,425	\$84,854	\$100,356	\$141,695
MANAGER	\$107,516	\$127,596	\$180,464	\$115,042	\$136,528	\$193,097
PROJECT MANAGER / SCRUM MASTER	\$95,316	\$112,854	\$159,622	\$101,988	\$120,753	\$170,795
SYSTEMS ANALYST	\$79,303	\$93,791	\$132,425	\$84,854	\$100,356	\$141,695
TECHNICAL WRITER	\$55,410	\$65,831	\$93,282	\$59,289	\$70,440	\$99,812
PROGAMMING						
SENIOR FULL-STACK DEVELOPER .NET	\$113,108	\$134,459	\$190,377	\$121,025	\$143,871	\$203,703
FULL-STACK DEVELOPER .NET	\$102,941	\$123,275	\$177,160	\$110,147	\$131,904	\$189,561
API BACK END DEVELOPER .NET	\$113,108	\$134,459	\$190,377	\$121,025	\$143,871	\$203,703
SENIOR API BACK END DEVELOPER JAVA	\$114,125	\$135,475	\$191,394	\$122,113	\$144,959	\$204,791
FULL-STACK DEVELOPER JAVA	\$103,958	\$124,292	\$178,177	\$111,235	\$132,992	\$190,649
API BACK END DEVELOPER JAVA	\$114,125	\$135,475	\$191,394	\$122,113	\$144,959	\$204,791
APPLICATIONS ARCHITECT	\$112,600	\$133,950	\$189,869	\$120,481	\$143,327	\$203,160
BUSINESS SYSTEMS ANALYST	\$78,286	\$93,028	\$132,171	\$83,766	\$99,540	\$141,423
CLOUD COMPUTING ANALYST	\$77,015	\$95,316	\$160,130	\$82,406	\$101,988	\$171,339
DEVELOPER/PROGRAMMER ANALYST	\$87,945	\$104,466	\$148,184	\$94,101	\$111,779	\$158,557

	NATIONWIDE			TEXAS		
	LOW	MEDIUM	HIGH	LOW	MEDIUM	HIGH
IOS DEVELOPER	\$120,987	\$143,609	\$203,340	\$129,456	\$153,661	\$217,574
ANDROID DEVELOPER	\$119,971	\$142,592	\$202,323	\$128,369	\$152,574	\$216,486
ENTERPRISE RESOURCE PLANNING						
ERP BUSINESS ANALYST	\$85,403	\$101,162	\$143,101	\$91,381	\$108,243	\$153,118
ERP TECHNICAL/FUNCTIONAL ANALYST	\$92,520	\$109,804	\$155,555	\$98,996	\$117,490	\$166,444
ERP TECHNICAL DEVELOPER	\$97,095	\$115,141	\$162,672	\$103,891	\$123,201	\$174,059
MID-TIER ERP BUSINESS ANALYST	\$82,353	\$97,603	\$138,017	\$88,117	\$104,435	\$147,678
MID-TIER ERP DEVELOPER	\$92,011	\$109,041	\$154,030	\$98,452	\$116,674	\$164,812
CONSULTING AND SYSTEMS INTEGRATIO	N					
DIRECTOR	\$119,462	\$141,830	\$200,798	\$127,825	\$151,758	\$214,854
PROJECT MANAGER/SENIOR CONSULTANT	\$98,620	\$116,921	\$165,722	\$105,523	\$125,105	\$177,323
STAFF CONSULTANT	\$62,527	\$77,523	\$130,138	\$66,904	\$82,951	\$139,247
SENIOR IT AUDITOR	\$108,533	\$128,867	\$182,752	\$116,131	\$137,888	\$195,545
IT AUDITOR	\$93,282	\$111,074	\$157,589	\$99,812	\$118,850	\$168,620
DATA / DATABASE ADMINISTRATION						
BIG DATA ENGINEER	\$129,375	\$153,522	\$217,065	\$138,432	\$164,268	\$232,260
NOSQL DEVELOPER	\$110,058	\$130,392	\$184,277	\$117,762	\$139,520	\$197,177
DATABASE DEVELOPER	\$99,891	\$118,446	\$167,756	\$106,884	\$126,737	\$179,498
DATABASE ADMINISTRATOR	\$78,032	\$97,603	\$159,622	\$83,494	\$104,435	\$170,795
DATA ANALYST/REPORT WRITER	\$81,336	\$96,587	\$137,255	\$87,030	\$103,348	\$146,862
DATA ARCHITECT	\$111,583	\$131,917	\$186,819	\$119,394	\$141,152	\$199,896
DATA SCIENTIST	\$102,178	\$121,496	\$171,314	\$109,331	\$130,000	\$183,306
DATA WAREHOUSE ANALYST	\$77,523	\$96,078	\$161,655	\$82,951	\$102,804	\$172,971
BUSINESS INTELLIGENCE ANALYST	\$86,420	\$107,008	\$179,956	\$92,469	\$114,499	\$192,553
DATA REPORTING ANALYST	\$59,223	\$74,473	\$110,058	\$63,369	\$79,687	\$117,762
INFRASTRUCTURE						
NETWORK ARCHITECT	\$115,904	\$137,509	\$194,444	\$124,017	\$147,135	\$208,055
NETWORK MANAGER	\$95,570	\$113,362	\$160,384	\$102,260	\$121,297	\$171,612



\$39,651

\$33,805

\$33,805

\$61,256

\$33,297

\$47,531

\$58,714

\$69,644

\$81,844

\$46,768

\$39,905

\$39,905

\$72,694

\$41,685

\$56,427

\$69,898

\$82,861

\$97,095

\$42,427

\$36,172

\$36,172

\$65,544

\$35,628

\$50,858

\$62,824

\$74,519

\$87,573

\$65,831

\$56,173

\$56,173

\$103,195

\$55,919

\$80,065

\$99,128

\$117,429

\$137,509

\$50,042

\$42,699

\$42,699

\$77,783

\$44,603

\$60,377

\$74,791

\$88,661

\$103,891

\$70,440

\$60,105

\$60,105

\$110,419

\$59,833

\$85.670

\$106,067 \$125,649

\$147,134

**HELP DESK TIER 2** 

**HELP DESK TIER 1** 

HARDWARE ANALYST

**CABLE/WRIING TECHNICIAN** 

PRODUCT SUPPORT SPECIALIST

**QUALITY ASSURANCE (QA) AND TESTING** 

**PC TECHNICIAN** 

**QA ENGINEER** 

**QA ARCHITECT** 

**QA/TESTING MANAGER** 

	NATIONWIDE			TEXAS		
	LOW	MEDIUM	HIGH	LOW	MEDIUM	HIGH
QA ENGINEER – AUTOMATED TOOLS	\$63,544	\$75,236	\$106,245	\$67,992	\$80,502	\$113,682
INBOUND AND DIGITAL MARKETING						
HEAD OF MARKETING	\$99,891	\$118,191	\$166,993	\$106,883	\$126,465	\$178,682
MARKETING DIRECTOR	\$116,921	\$139,034	\$197,240	\$125,105	\$148,766	\$211,047
MARKETING MANAGER	\$81,844	\$97,095	\$137,509	\$87,573	\$103,891	\$147,134
DIGITAL MARKETING MANAGER	\$81,844	\$97,095	\$137,509	\$87,573	\$103,891	\$147,134
BRAND MANAGER	\$63,544	\$75,236	\$106,245	\$67,992	\$80,502	\$113,682
CAMPAIGN MANAGER	\$58,714	\$69,898	\$99,128	\$62,824	\$74,791	\$106,067
CRM MARKETING MANAGER	\$81,844	\$97,095	\$137,509	\$87,573	\$103,891	\$147,134
ECOMMERCE DIRECTOR	\$94,807	\$112,345	\$159,114	\$101,444	\$120,210	\$170,251
ECOMMERCE MANAGER	\$81,844	\$97,095	\$137,509	\$87,573	\$103,891	\$147,134
SEO/OPTIMIZATION MANAGER	\$61,256	\$72,694	\$103,195	\$65,544	\$77,783	\$110,419
DIGITAL MARKETING SPECIALIST	\$55,410	\$65,831	\$93,282	\$59,289	\$70,440	\$99,812
PAID SEARCH SPECIALIST	\$53,123	\$63,544	\$90,995	\$56,841	\$67,992	\$97,364
EMAIL MARKETING SPECIALIST	\$50,835	\$61,256	\$88,707	\$54,393	\$65,544	\$94,917
SOCIAL MEDIA AND CONTENT						
HEAD OF SOCIAL	\$81,844	\$97,095	\$137,509	\$87,573	\$103,891	\$147,134
SOCIAL MEDIA MANAGER	\$63,544	\$75,236	\$106,245	\$67,992	\$80,502	\$113,682
CONTENT DIRECTOR	\$61,256	\$72,694	\$103,195	\$65,544	\$77,783	\$110,419
CONTENT MARKETING MANAGER	\$69,644	\$82,861	\$117,429	\$74,519	\$88,661	\$125,649
CONTENT PRODUCER	\$55,410	\$65,831	\$93,282	\$59,289	\$70,440	\$99,812
SENIOR COPYWRITER	\$53,123	\$63,544	\$90,995	\$56,841	\$67,992	\$97,364
COPYWRITER	\$50,835	\$61,256	\$88,707	\$54,393	\$65,544	\$94,917

# HOT SKILLS IN 2019

### Software Development



- .NET / C#
- ▶ AGILE AND SCRUM CERTIFICATIONS
- JAVASCRIPT LIBRARIES AND FRAMEWORKS ANGULAR, REACT, BOOTSTRAP
- FULL STACK DEVELOPERS
- JAVA
- MICROSOFT SQL SERVER
- OWASP DEVELOPMENT
- PHP / LAMP
- CONTENT MANAGEMENT SYSTEMS (CMS)
- FRONT END DEVELOPERS
- ▶ JAVA EE/J2EE

### Security and Infrastructure

- CISSP (CERTIFIED INFORMATION SYSTEMS SECURITY PROFESSIONAL)
- **CCNA (CISCO CERTIFIED NETWORK ASSOCIATE)**
- CCNP (CISCO CERTIFIED NETWORK PROFESSIONAL)
- **COMPTIA A+**
- **VMWARE**
- ► FIREWALL ADMINISTRATION



### **Project and Integration**

- DATA SCIENTISTS
- DATABASE DEVELOPERS
- **DATA ARCHITECTS**
- ANYONE WITH A MASTERS IN DATA SCIENCE

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### Quality Assurance (QA) & Testing

- **PERFORMANCE TESTING**
- **•** TESTING ARCHITECTS
- **•** TESTING ENGINEERS WITH SCRIPTING

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# CONTACT US



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