2019 State of Salaries Report

Data reveals tech worker salary trends across the globe
Key Findings

Short on time? Here’s what you need to know

1. San Francisco pays tech workers the most: $145K on average

2. Tech salaries in Boston and Toronto grew 9%, more than any other major city in the past 12 months

3. Austin tech workers get the most bang for their buck — they’d need an $83K raise to maintain the same standard of living in San Francisco

4. Only half of tech talent in London believe they’re paid fairly given the city’s cost of living

5. Only 23% of techies with master’s and/or doctorates believe they command higher salaries because of their advanced degree

6. For techies considering relocation to another city, Austin, Seattle, and Amsterdam are most attractive

7. Asian tech workers out-earn their white counterparts by $2K, while black tech workers are the lowest paid (earning $13K less than Asian tech workers)

8. 60% of tech talent plan to leave their current city within 5 years
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Overview

For the fourth consecutive year, Hired is releasing its annual State of Salaries report — and, once again, the results reveal that tech salaries in U.S. markets are steadily rising. We analyzed data from our career marketplace, looking specifically at salaries for global technology workers, including software engineers, product managers, DevOps, designers, and data analytics roles, to help answer the questions that are top of mind for tech talent today:

- Does an advanced degree equate to a higher paycheck?
- How does my salary stack up against my counterparts’ in other cities around the world?
- Beyond salary, which compensation benefits are most appealing to tech workers?
- Where is the next up and coming tech hub?
- What are my tech skills worth in the current hiring market?

Because our data is from real job offers made by companies to tech workers on our platform, we have a unique window into the key salary trends shaping every industry.
Hired facilitates the job search process from the initial interview request a company makes, which includes compensation details upfront, all the way to the final job offer a tech worker receives. With that, we have unprecedented visibility into salary data across a variety of geographies, companies, and positions.

In addition to mining our marketplace data, we also surveyed tech talent on Hired to better understand how compensation affects their job satisfaction and personal fulfillment.

The real salary data in this report comes from more than 420,000 interview requests and job offers facilitated through our total marketplace of 10,000 participating companies and more than 98,000 job seekers. Survey data is based on responses from more than 1,800 global tech candidates on our marketplace.

Sharing real tech salary trends from our marketplace empowers tech talent to find a job they love with a salary they deserve — in a city that makes sense for their wallet, lifestyle and career development. For companies, we recognize that their hiring funnel is just as important as their revenue funnel and that great people are the foundation of every successful business. It’s more important than ever for companies to have a robust hiring process that enables them to build strong teams.

When companies are able to offer salaries that are competitive in an ever-changing hiring market, it unlocks the opportunity for more predictable hiring.
For the fourth year in a row, the San Francisco Bay Area comes out on top as the highest paying market for tech workers, with salaries up 2% in the last year. This doesn't come as a surprise considering its skyrocketing rents and booming technology sector. However, many cities — nationally and globally — are giving the Bay Area a run for its money, literally. The average Boston tech worker was paid 9% more in 2018 than in 2017 — and tech workers in Austin and Washington D.C., aren't far behind, making 6% more than last year. Paychecks are growing even faster on the east coast, with tech salaries in both Boston and Toronto increasing by 9%, more than any other major city in the past 12 months.

The growth in salaries also reflects certain attitudes tech workers have regarding their compensation and equity. One in three tech workers expect a raise within eight months of starting at a new company if they receive a positive performance review — possibly putting pressure on companies to boost salaries across the board. And despite this year's IPO wave, more than half of global tech workers (54%) are on the fence about forgoing a higher salary for company equity. Similarly, 69% of UK tech workers are unsure about accepting equity in lieu of a higher base salary.
2019 Average Tech Worker Salaries

Global Average*  
$129K

U.S. Average  
$135K

*This year, the global average tech worker salary decreased as a result of Hired’s growth in secondary tech markets including Denver, Boston, Chicago and London, where on average tech workers receive lower salaries than their peers in more established tech hubs.
Year-Over-Year Salary Change in Each Local Market

**Austin**
- 2015: $108K
- 2016: $110K
- 2017: $118K
- 2018: $125K

**Boston**
- 2015: $120K
- 2016: $118K
- 2017: $117K
- 2018: $127K

**Chicago**
- 2015: $107K
- 2016: $106K
- 2017: $113K
- 2018: $114K

**Denver**
- 2015: $112K
- 2016: $114K
- 2017: $129K
- 2018: $128K

**London***
- 2015: £70K ($94K)
- 2016: £57K ($73K)
- 2017: £58K ($78K)
- 2018: £62K ($79K)

**Los Angeles**
- 2015: $118K
- 2016: $122K
- 2017: $129K
- 2018: $133K

**New York**
- 2015: $121K
- 2016: $122K
- 2017: $129K
- 2018: $133K

**Paris***
- 2015: No data
- 2016: €50K ($59K)
- 2017: €48K ($56K)
- 2018: €52K ($60K)

As Hired launched in Paris in 2016, 2015 data is not available.

Boston, Austin and D.C. are giving San Francisco a run for its money.
To account for cost of living and exchange rate effects, two axes were used: a U.S. and non-U.S. axis.

*Boston, Austin and D.C. are giving San Francisco a run for its money*
# Salaries for Top Software Engineering Roles

<table>
<thead>
<tr>
<th>Location</th>
<th>Role 1</th>
<th>Salary 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF Bay Area</td>
<td>Search engineer</td>
<td>$157K</td>
</tr>
<tr>
<td></td>
<td>Security engineer</td>
<td>$156K</td>
</tr>
<tr>
<td></td>
<td>Blockchain engineer</td>
<td>$155K</td>
</tr>
<tr>
<td></td>
<td>Gaming engineer</td>
<td>$147K</td>
</tr>
<tr>
<td></td>
<td>Blockchain engineer</td>
<td>$157K</td>
</tr>
<tr>
<td></td>
<td>Security engineer</td>
<td>$156K</td>
</tr>
<tr>
<td></td>
<td>Blockchain engineer</td>
<td>$155K</td>
</tr>
<tr>
<td>New York</td>
<td>Gaming engineer</td>
<td>$147K</td>
</tr>
<tr>
<td></td>
<td>Blockchain engineer</td>
<td>$137K</td>
</tr>
<tr>
<td></td>
<td>Backend engineer</td>
<td>$136K</td>
</tr>
<tr>
<td>Toronto</td>
<td>Natural language processing engineer</td>
<td>$112K CAD (USD $83K)</td>
</tr>
<tr>
<td></td>
<td>Machine learning engineer</td>
<td>$108K CAD (USD $80K)</td>
</tr>
<tr>
<td></td>
<td>Blockchain engineer</td>
<td>$107K CAD (USD $79K)</td>
</tr>
<tr>
<td>London</td>
<td>Embedded engineer</td>
<td>£71K (USD $90K)</td>
</tr>
<tr>
<td></td>
<td>Blockchain engineer</td>
<td>£69K (USD $89K)</td>
</tr>
<tr>
<td></td>
<td>Data engineer</td>
<td>£68K (USD $87K)</td>
</tr>
<tr>
<td>Paris</td>
<td>Blockchain engineer</td>
<td>€58K (USD $67K)</td>
</tr>
<tr>
<td></td>
<td>Machine learning engineer</td>
<td>€56K (USD $65K)</td>
</tr>
<tr>
<td></td>
<td>Data engineer</td>
<td>€54K (USD $62K)</td>
</tr>
</tbody>
</table>
Tech workers want more bang for their buck — and will move for it

Despite the Bay Area’s large paychecks, job seekers are feeling underpaid due to the high cost of living and sky-high real estate prices. They have begun noticing the perks of relocating, which include offsetting certain expenses or avoiding high taxes. To see how other cities fare in a cost of living comparison, we asked, “How much further do average tech salaries stretch in other cities compared to San Francisco?”

Average Tech Worker Salary Adjusted for Cost of Living in San Francisco

Source: Ranked list of salary by COL adjustment (USD and local converted as of 12/31/2018)
For the third consecutive year, Austin tops the list at an adjusted salary of $208K, meaning Austin tech workers would need a $83K raise to maintain their current standard of living in San Francisco. Denver and Seattle take second and third place with adjusted salaries of $185K and $182K, respectively.

Tech workers are considering the benefits of living and working in those cities, too: When we surveyed our marketplace, Austin, Seattle, and Denver landed in the top five for destinations tech talent would most like to relocate to.

When analyzing our survey data, we also learned that 60% of tech talent have plans to leave their current city within 5 years; and we wanted to know: why?

**Given the cost of living in your current city, do you think you’re compensated fairly?**

- **53%** Yes
- **47%** No

Almost half of tech workers don’t think they’re compensated fairly given the cost of living in their current city.

**What are the main motivators for you to relocate?**

- **41%** I want to experience a new city
- **26%** I want to live in a less expensive city
- **19%** I am interested in a specific job opportunity outside of my current city
- **14%** I want to live closer to family
Which city tops your list of places to relocate?

1. **Austin**  
   Did you know that Austin is the *fastest growing* large metro in the nation — 8 times running?

2. **Seattle**  
   Seattle has experienced a massive rise in housing costs; average rent prices increased by 35% between 2010 and 2017.

3. **Amsterdam**  
   Amsterdam has been named the best European tech city to work in, hosting 578 international information and communications technology organizations, 170 of which have chosen Amsterdam as their headquarters.

4. **Los Angeles**  
   Our global survey respondents ranked LA as the third most popular city to relocate to for tech talent without children, and #7 for tech talent with children. London techies consider LA the most appealing U.S. city for relocation.

5. **Denver**  
   Colorado has one of the nation's lowest unemployment rates, especially in IT which has resulted in huge shortages for in-demand roles like IT engineers and software developers.
Advanced degrees don’t pay for themselves

Tech giants like Apple, Google and PayPal have moved away from traditional education requirements and are increasingly interested in candidates with specific in-demand tech skills and on-the-job experience that may not be acquired through higher education. Though earning an advanced degree can have a lot of benefits, many struggle with the same question: is it worth it financially? This year, we decided to get to the bottom of it and raised the question to tech workers who have earned master’s or doctorate degrees.

Do you think your master’s or doctorate degree has impacted your career?

- **31%** No, I could have the exact same job without it
- **25%** Yes, I couldn’t have the job I have today without it
- **23%** Yes, I earn a higher salary because of it
- **21%** Not sure
We’ve also found that tech workers are looking into alternate forms of learning. Our 2019 State of Software Engineers Report revealed that as innovative companies become more open to other forms of education, coding bootcamps are earning their stripes as a legitimate alternative to a college degree. In the London hiring market specifically, we are seeing a stronger propensity to hire software engineers that have attended bootcamps versus markets in the U.S.
Where Developers Learn to Code

- Earned a computer science degree: 46%
- Self-taught: 21%
- Have a relevant college degree (such as mathematics or engineering): 20%
- Participated in developer bootcamps: 13%

Do you think your bootcamp helped you prepare to get an engineering job?

- Yes: 76%
- No: 24%

As a technical hiring manager, would you hire a bootcamp grad for an open role?

- Yes: 57%
- Not sure: 36%
- No: 7%
The wage gap experienced by black tech workers is widening

At Hired, we believe we have a responsibility to our community, our employees, and the hiring industry at large to serve as a catalyst for a more inclusive, diverse, and equitable workforce. This includes creating transparency through shared data in hopes of one day reaching fair pay, regardless of a person's gender, age, sexual orientation, or race. This year, when examining how race impacts a person's salary, we found that for the first time, Asian tech workers are out-earning their white counterparts by $2K on average.

### 2019 Average Preferred Salaries and Salary Offers by Race in the U.S.

<table>
<thead>
<tr>
<th>Race</th>
<th>2019 Offered Salary</th>
<th>2019 Preferred Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>$137K</td>
<td>$131K</td>
</tr>
<tr>
<td>Black</td>
<td>$124K</td>
<td>$123K</td>
</tr>
<tr>
<td>Hispanic</td>
<td>$128K</td>
<td>$111K</td>
</tr>
<tr>
<td>White</td>
<td>$135K</td>
<td>$132K</td>
</tr>
</tbody>
</table>
Unfortunately, we're disheartened to report that black tech workers are still paid the least, earning $13K less than Asian tech workers. Since last year's report, average salary offers have increased for Asian workers but have decreased across all other races. Additionally, the wage gap between black tech workers and their white colleagues has widened by $5K.

<table>
<thead>
<tr>
<th></th>
<th>2018 Offered Salary by Race</th>
<th>2018 Preferred Salary by Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>$133K</td>
<td>$127K</td>
</tr>
<tr>
<td>Black</td>
<td>$130K</td>
<td>$124K</td>
</tr>
<tr>
<td>Hispanic</td>
<td>$131K</td>
<td>$124K</td>
</tr>
<tr>
<td>White</td>
<td>$136K</td>
<td>$130K</td>
</tr>
</tbody>
</table>
Salaries plateau after age 40

Our data also shines a light on a less talked about form of bias within tech: ageism. This year, our data shows that the average tech worker’s salary plateaus after age 40 in the U.S.

Average Preferred Salaries and Salary Offers by Age in the U.S.

Homeownership is a symbol of success for many, but the high cost of living in many tech hubs has caused people to rent for far longer than past generations. So we asked the question: can tech workers afford to buy a house?

Tech workers who own vs. rent

65% of global tech talent currently rent their homes/apartments

71% of London tech workers currently rent their homes/apartments
We recognize that for most tech workers, their careers are more than a salary number; work is an opportunity to help solve challenging problems that affect all of our lives. That's why we asked tech workers to tell us which pressing global issues they most hope to solve in their careers.
What are the top three global issues that tech workers are interested in solving?

1. Economic opportunity/unemployment
2. Global warming
3. Lack of access to education
To better understand what types of companies offer the most competitive salaries to tech workers, we broke down salary offers on Hired by industry. We found that companies in the technology industry offer the most in the U.S. at $141K on average.

In the UK, tech workers in the **healthcare and finance sectors** are earning the most. The **technology sector does not pay** the top salaries that it does in the U.S., with techies in this vertical earning the second lowest average salary. U.S. companies in communications and transportation offer technology workers the least, with salaries averaging $130K and $135K respectively.

### Average Tech Worker Salary by Industry

<table>
<thead>
<tr>
<th>USA</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology</strong></td>
<td><strong>Healthcare</strong> £67K ($85K)</td>
</tr>
<tr>
<td>$141K</td>
<td>£64K ($82K)</td>
</tr>
<tr>
<td>Retail (ecommerce) $140K</td>
<td>Financial Services £64K ($82K)</td>
</tr>
<tr>
<td>Entertaiment $140K</td>
<td>Entertainment £62K ($79K)</td>
</tr>
<tr>
<td>Healthcare $140K</td>
<td>Communications (media) £61K ($78K)</td>
</tr>
<tr>
<td>Education $138K</td>
<td>Retail (ecommerce) £59K ($75K)</td>
</tr>
<tr>
<td>Financial Services $136K</td>
<td>Education £59K ($76K)</td>
</tr>
<tr>
<td>Transportation $135K</td>
<td>Technology £59K ($75K)</td>
</tr>
<tr>
<td>Communications (media) $130K</td>
<td>Transportation*</td>
</tr>
</tbody>
</table>

*Not enough sample size to report average salary*
Tech talent with expertise in GO and Scala are hot

The demand for highly skilled tech workers is not slowing down anytime soon, but certain roles and skills are more desirable than others. Among software engineers, full stack developers are the most in-demand in the U.S., while backend engineers are most sought after in the UK.

Year-Over-Year Salary Change for Specific Roles in the U.S.

**Software Engineering**
- 2015: $129K
- 2016: $131K
- 2017: $137K
- 2018: $139K

**Product Management**
- 2015: $127K
- 2016: $140K
- 2017: $145K
- 2018: $146K

**Design**
- 2015: $118K
- 2016: $118K
- 2017: $127K
- 2018: $124K

**Data Scientist**
- 2015 (Note we don't have data from): $135K
- 2016 (Note we don't have data from): $128K
- 2017: $135K
- 2018: $128K

Note we don't have data from 2016 & 2015
Tech talent with expertise in GO and Scala are hot.

As tech talent continues to be foundational to innovative companies, it's critical for job seekers to know which skills are table stakes in today's hiring market. Our data reveals the most in-demand tech skills; Node.js and SQL made the list this year alongside JavaScript, Java, and Python.

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**Year-Over-Year Salary Change for Specific Roles in the UK**

<table>
<thead>
<tr>
<th>Role</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Software Engineering</strong></td>
<td>£55K ($70K)</td>
<td>£58K ($74K)</td>
<td>£61K ($78K)</td>
</tr>
<tr>
<td><strong>Product Management</strong></td>
<td>Not enough sample</td>
<td>£61K ($78K)</td>
<td>£69K ($88K)</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>NOT ENOUGH SAMPLE</td>
<td>£50K ($63K)</td>
<td>£51K ($65K)</td>
</tr>
<tr>
<td><strong>Data Scientist</strong></td>
<td>Not enough sample</td>
<td>£61K ($78K)</td>
<td>£61K ($78K)</td>
</tr>
</tbody>
</table>

*Hired launched in the UK in 2016, so we don’t have 2015 data available to compare to U.S. salaries

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**Most In-Demand Software Engineering Positions by Country**

<table>
<thead>
<tr>
<th>Position</th>
<th>USA</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Stack Engineer</td>
<td>1</td>
<td>Backend Engineer</td>
</tr>
<tr>
<td>Backend Engineer</td>
<td>2</td>
<td>Full Stack Engineer</td>
</tr>
<tr>
<td>Frontend Engineer</td>
<td>3</td>
<td>Frontend Engineer</td>
</tr>
<tr>
<td>Mobile Engineer</td>
<td>4</td>
<td>Data Engineer</td>
</tr>
<tr>
<td>Data Engineer</td>
<td>5</td>
<td>Mobile Engineer</td>
</tr>
<tr>
<td>Machine Learning Engineer</td>
<td>6</td>
<td>Machine Learning Engineer</td>
</tr>
</tbody>
</table>

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*Hired 2019 State of Salaries Report*
Tech talent with expertise in GO and Scala are hot

Beyond top ranked tech skills, we took a deeper look at software engineering roles to understand demand for specific programming languages based on years of experience and how that affects the number of interview requests candidates receive on our platform.

**Top 5 In-Demand Tech Skills**

1. Javascript
2. Java
3. Python
4. Node.js
5. SQL

**Top Programming Languages by Years of Experience**

**4-5 years of job experience**
- Go: 11.0
- Ruby: 11.0
- Scala: 10.7
- JavaScript: 8.6
- TypeScript: 8.4

**6-10 years of job experience**
- Ruby: 11.7
- Go: 10.5
- Scala: 9.9
- TypeScript: 8.7
- Kotlin: 8.2

**10+ years of job experience**
- Ruby: 11.7
- TypeScript: 8.7
- Go: 10.5
- Kotlin: 8.2
Conclusion

While societal norms have perpetuated the idea that discussing salary is taboo, we are bringing transparency to the forefront by publishing salary data and trends for job seekers. We believe that empowering tech talent with actual salary data is a critical factor in helping everyone find a job they love. This year’s report shows promising trends, with average salaries increasing across nearly every U.S. and international market. But it also revealed unsettling data points that prove inequality still exists: the wage gap between black tech workers and their white colleagues widened by $5K.

Our annual reports arm candidates with the real data they need to know the value of their skills and ask for what they are worth. For companies, our real salary data uncovers the compensation trends and benchmarks they need to ensure fair pay and the ability to attract top tech talent in a competitive hiring market.

At Hired, we are committed to quantifying the ever-changing state of salaries in tech and hope that our dedication to data transparency will help candidates and the world’s most innovative companies make more informed decisions and build a more equitable future.
Methodology

This report is based on Hired’s proprietary information, data from real job offers on the platform from companies to tech workers, gathered and analyzed by Hired’s data science team. For the purpose of this report, we focused on technology workers in 13 cities. The salaries included reflect more than 420,000 interview requests and job offers from the past year facilitated through our marketplace of more than 10,000 participating companies and 98,000 job seekers. Age and race data was collected through an optional demographics survey given to Hired candidates that is used only for aggregated research purposes and not shared with Hired clients. Where numbers have been adjusted to reflect cost of living in a given market, we used data from the site Numbeo, which factors in data such as rent and real estate prices, groceries, transportation, utilities, local taxes, and more.

In addition to our proprietary data, we collected survey responses from more than 1,800 tech workers across the globe on the Hired platform to inform our understanding of how education, salaries, benefits and cost of living affect workers’ decision making and satisfaction.
About Hired

Hired (hired.com) is a marketplace that matches tech talent with the world’s most innovative companies. Hired combines intelligent job matching with unbiased career counseling to help people find a job they love. Through Hired, job candidates and companies have transparency into salary offers, competing opportunities and job details. This level of insight is unmatched, making the recruiting process quicker and more efficient than ever before.

Hired was founded in 2012 and is headquartered in San Francisco, with offices in the United States, Canada, France, and the UK. For more information, news, and tips for job candidates and employers, visit Hired’s blog.