



2024 Benchmark Report:

# **Software Engineer Salaries in the United States**



# Software Engineer Salaries in the United States

Software engineers are known to be some of the highest paid jobs in the tech industry. In some years, software engineer salaries have stagnated or fallen in response to market conditions. Most recently, salaries have dropped by 9% to 15% due to overhiring, mass layoffs, hiring freezes, the acceptance of remote work, and the increasing use of AI to automate some engineering tasks.<sup>1</sup> However, the overall trend for salaries is positive when you zoom out. Data from the U.S. Bureau of Labor Statistics reflects a continual increase, with the average computer programmer annual salary increasing from \$61,540 in 2000 to \$91,610 in 2020.<sup>2</sup>

Table 1:

Role	2000	2010	2020
Computer Programmers	\$61,540	\$75,950	\$91,610
Computer Software Engineers, Applications	\$70,230	\$92,310	-
Computer Software Engineers, Systems Software	\$71,510	\$97,530	-
Software Developers and Software Quality Assurance Analysts & Testers	-	-	\$114,360
Web Developers and Digital Interface Designers	-	-	\$84,430

Table 1. "Occupational Employment and Wage Statistics," U.S. Bureau of Labor Statistics, <https://www.bls.gov/oes/tables.htm>

Note: Over time, the U.S. Bureau of Labor Statistics has changed how it categorizes these roles. While the Computer Programmers occupation has remained, the distinction between Computer Software Engineers, Applications and Computer Software Engineers, Systems Software was removed in 2019 and the Software Developers and Software Quality Assurance Analysts and Testers and Web Developers and Digital Interface Designers occupations were added.

<sup>1</sup> Luis Minvielle, "Are Software Engineer Wages Being Pushed Down? A Report on Tech Salaries," WeAreDevelopers, April 17, 2024, <https://www.wearedevelopers.com/magazine/are-software-engineer-wages-being-pushed-down>.  
<sup>2</sup> "Occupational Employment and Wage Statistics," U.S. Bureau of Labor Statistics, <https://www.bls.gov/oes/tables.htm>

On top of that, advancements in tech and new innovations push compensation higher as engineers specialize and upskill. Skills and experience in emerging technologies like AI are high in demand, yet the supply of engineers in the first few years of these new fields is extremely limited. As a result, these engineers are able to command incredibly high salaries and receive large amounts of equity.

Between the pandemic and rise in AI, where do salaries for software engineers currently stand in 2024? This report lays out the most recent U.S. salary benchmarking data for software engineers, broken out by role, level, and city. With these benchmarks, HR and engineering leaders will gain an understanding of today's market and be prepared to pay competitively in order to secure the best engineering talent.

## Data and Methodology

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This report uses data from Pave and Karat.

Salary data is drawn from Pave, the end-to-end compensation management platform. Most of Pave's dataset comes from roughly 8,000 customers who are integrated through HR, equity management, and applicant tracking systems.

We layer on geographic data on elite and strong engineering talent from Karat, the world's leader in technical interviewing, which allows us to drill down even further to understand how compensation varies based on where software engineers are located. Karat identifies 31 cities with the highest concentrations of elite candidates and at least 10,000 total software engineers living in the greater metropolitan area. Elite candidates are defined as software engineers who perform in the top quartile of all technical interviews globally, based on Karat's dataset of more than 350,000 interviews. Karat also ranks these 31 cities by strong candidates who fall outside of the top quartile but still perform well enough in technical interviews to advance to the next stage of hiring at most companies.

# Software Engineer Salaries in the United States by Role

Salaries for engineers vary by role, as there are many different types of engineers that each have their specific skill sets. Common roles at technology companies include software engineers, security engineers, hardware engineers, development operations (DevOps) engineers, data engineers, and machine learning engineers. The median salary for each varies slightly, with more in-demand positions holding a higher salary.

**Table 2**

Role	Median Salary
<b>Software Engineer</b> Focuses on the development, design, and integration of software applications, ensuring robust and efficient solutions.	\$166,000
<b>Security Engineer</b> Ensures the protection of digital assets through the design and management of security systems and practices, while identifying and mitigating risks.	\$139,050
<b>Hardware Engineer</b> Designs and tests electrical systems and components to meet project objectives and safety standards.	\$133,271
<b>DevOps Engineer</b> Streamlines software development processes through automation, continuous integration, and efficient software delivery.	\$148,190
<b>Data Engineer</b> Develops and maintains data infrastructure, ensuring data integrity and accessibility for analytical decision-making.	\$150,000
<b>Machine Learning Engineer</b> Develops solutions using machine learning techniques, from research to model training and evaluation.	\$177,238

## Software Engineer

Software engineering is a resilient role that's gone through several cycles of growth and contraction. When the dot-com bubble burst in 2001, almost 700,000 employees from high-tech companies were laid off.<sup>3</sup> In 2003, the unemployment rate for computer scientists was 5.2% — “the highest level since the government began tracking this work as an occupation two decades ago.”<sup>4</sup> In most years, the unemployment rate was under 2%.<sup>5</sup> However, the market quickly bounced back. By 2005, IT employment surpassed the peak of the bubble, and by 2007, IT employment was 6.9% higher than the peak of the dot-com bubble.<sup>6</sup>

Since the 2010s, the demand for software engineers has outpaced supply. In 2010, the tech industry was rapidly growing, with companies like Google, Twitter, and Facebook creating thousands of new jobs and having the funds to pay for top-tier engineers.<sup>7</sup> From 2011 to 2021, the tech industry added an average of 100,000 jobs annually and “recouped all the jobs it lost when the dot-com bubble burst.”<sup>8</sup>

Today, software development job postings are down 28% from pre-pandemic levels as the tech industry has seen thousands of layoffs.<sup>9</sup> Additionally, software engineers are concerned about how AI will impact their prospects. A survey found that 90% of software engineers are finding it more difficult to find a job and 66% say it's “much harder.”<sup>10</sup> Many (80%) also feel that the job market is more competitive, and 6% are only “extremely confident” in their job prospects.<sup>11</sup>

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<sup>3</sup> Elizabeth Corcoran, “From the Internet wreckage, the spirit of Silicon Valley emerges,” *Forbes Magazine*, February 18, 2002, [https://images.forbes.com/forbes/2002/0218/074\\_print.html](https://images.forbes.com/forbes/2002/0218/074_print.html).

<sup>4</sup> Steve Lohr & Matt Richtel, “Lingering Job Insecurity of Silicon Valley,” *Herald-Tribune*, last updated March 8, 2004, <https://www.heraldtribune.com/story/news/2004/03/09/lingering-job-insecurity-silicon-valley/28792765007>.

<sup>5</sup> Ibid.

<sup>6</sup> Raymond R. Panko, “IT employment prospects: beyond the dotcom bubble,” *European Journal of Information Systems*, July 31, 2008, <https://link.springer.com/article/10.1057/ejis.2008.19>.

<sup>7</sup> Nick Saint, “Why It's So Darn Hard To Hire A Decent Engineer – Even In This HORRIBLE Job Market,” *Business Insider*, September 10, 2010, <https://www.businessinsider.com/engineer-shortage-2010-9>.

<sup>8</sup> Tripp Mickle, “Tech Layoffs Shock Young Workers. The Older People? Not So Much,” *The New York Times*, last updated January 23, 2023, <https://www.nytimes.com/2023/01/20/technology/tech-layoffs-millennials-gen-x.html>.

<sup>9</sup> The Tech Panda, “The Competitive Landscape of the Software Development Job Market,” *HackerNoon*, April 7, 2024, <https://hackernoon.com/the-competitive-landscape-of-the-software-development-job-market>.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

## Security Engineer

Security engineering has always been a highly in-demand job and it has only become more important as technology advances, creating new opportunities for cyber attacks and threats to information security. There has historically been a shortage of security engineers going as far back as 2014. The Cisco 2014 Annual Security Report warned of a worldwide shortage of information security professionals, despite cyberattacks and data breaches increasing each year.<sup>12</sup>

Back then, information security was considered one of the best jobs and candidates received multiple offers with salary increases averaging over 30%.<sup>13</sup> Employers also scrambled to retain employees, offering salary increases of 10% or more.<sup>14</sup>

Ten years later now, the shortage of security engineers remains. Cybersecurity engineering is one of the fastest-growing jobs in the U.S.<sup>15</sup> Companies are struggling to hire because there's more demand than supply, which also leads to burnout among cybersecurity engineers. There were 3.5 million unfilled global cybersecurity jobs in 2023, and that talent shortage is expected to persist through at least 2025.<sup>16</sup> While the tech industry saw massive layoffs during the pandemic, hiring in cybersecurity has remained strong, with "a near-zero unemployment marketplace for those with extensive backgrounds."<sup>17</sup>

## Hardware Engineer

Demand for hardware engineers is expected to increase by 5% from 2021 to 2031, keeping pace with the average for all occupations.<sup>18</sup> While the growth in hardware

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<sup>12</sup> Steve Morgan, "Cybersecurity job market to suffer severe workforce shortage," CSO Online, July 28, 2015, <https://www.csoonline.com/article/552221/cybersecurity-job-market-figures-2015-to-2019-indicate-severe-workforce-shortage.html>.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> Morgan Smith, "Companies have an 'incredible need' for this in-demand skill, says Google exec—and it pays over \$100,000 a year," CNBC, last updated November 26, 2023, <https://www.cnbc.com/2023/11/24/companies-have-an-incredible-need-for-this-in-demand-skill-says-google-exec.html>.

<sup>16</sup> Steve Morgan, "Cybersecurity Jobs Report: 3.5 Million Unfilled Positions In 2025," Cybercrime Magazine, April 14, 2023, <https://cybersecurityventures.com/jobs/>.

<sup>17</sup> Ibid.

<sup>18</sup> Doug Wintemute, "How to Become a Hardware Engineer," ComputerScience.org, last updated October 30, 2023, <https://www.computerscience.org/careers/computer-hardware-engineer/how-to-become/>.

hasn't increased as rapidly as software engineering roles, hardware engineering suffers from a skills shortage. For example, the global chip shortage that started in 2020 due to the COVID-19 pandemic has lingered on for several years partially due to the lack of skilled engineers.<sup>19</sup> Even though the semiconductor industry is estimated to grow by more than 115,000 jobs from 2023 to 2030, 67,000 jobs are at risk of being unfilled.<sup>20</sup>

Today, U.S. tech giants like Google, Microsoft, and Meta are looking to build their own hardware engineering teams to create in-house AI hardware infrastructure.<sup>21</sup> With more jobs than engineers, candidates are able to drive the market. Some candidates are able to increase their pay by 10%, and candidates who receive multiple offers can spark bidding wars.<sup>22</sup>

## DevOps Engineer

In the mid-2010s, DevOps was rising in demand as companies saw how DevOps engineers could reduce downtime, allowing teams to deploy code more frequently and pursue more aggressive deadlines.<sup>23</sup> However, DevOps is a position that's notoriously difficult to hire for. A 2016 study found that DevOps engineers are the hardest position for IT teams to keep filled.<sup>24</sup>

Today, hiring for DevOps continues to be a challenge, partially due to high demand and a limited supply of qualified engineers. While the role was named one of the 15 most in-demand tech jobs for 2024, a 2021 report from the DevOps Institute found that 64% of respondents had trouble finding skilled candidates.<sup>25, 26</sup>

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<sup>19</sup> Esther Shein, "Global Chip Shortage: Everything You Need to Know," TechRepublic, October 19, 2023, <https://www.techrepublic.com/article/global-chip-shortage-cheat-sheet/>.

<sup>20</sup> Ibid.

<sup>21</sup> "US Job Market Trend: More Hardware Job Openings than Software Job Openings," Chipress, April 27, 2024, <https://chipress.online/2024/04/27/us-job-market-trend-more-hardware-job-openings-than-software-job-openings/>.

<sup>22</sup> "Most Sought-After Talent : Hardware Engineers," Triple Crown Consulting, <https://www.tripleco.com/most-sought-after-talent-hardware-engineers/>.

<sup>23</sup> Larry Alton, "How Long Will DevOps Remain in Demand?," InformationWeek, May 31, 2017, <https://www.informationweek.com/it-leadership/how-long-will-devops-remain-in-demand-#close-modal>.

<sup>24</sup> Ibid.

<sup>25</sup> Sarah K. White, "The 15 most in-demand tech jobs for 2024 — and how to hire for them," CIO, January 5, 2024, <https://www.cio.com/article/230935/hiring-the-most-in-demand-tech-jobs-for-2021.html>.

<sup>26</sup> "2021 Upskilling Enterprise DevOps Skills Report," DevOps Institute, 2021, [https://insights.devopsinstitute.com/hubfs/Automation%20Downloads/Upskilling%202021-Enterprise%20DevOps%20Skills%20Report.pdf?utm\\_campaign=Upskilling%202021&utm\\_medium=email&\\_hsmi=121425890&\\_hsenc=p2ANqtz-8Cj74GN](https://insights.devopsinstitute.com/hubfs/Automation%20Downloads/Upskilling%202021-Enterprise%20DevOps%20Skills%20Report.pdf?utm_campaign=Upskilling%202021&utm_medium=email&_hsmi=121425890&_hsenc=p2ANqtz-8Cj74GN)



Additionally, DevOps is not taught in schools.<sup>27</sup> Instead, it's learned through self-education and on-the-job experiences.<sup>28</sup> The role also requires skills and knowledge across multiple levels of the tech stack, as well as strong soft skills.<sup>29</sup>

All together, these factors contribute to making DevOps a difficult and costly engineering role to hire for.

## Data Engineer

The data engineering role emerged in the early to mid-2010s when there was a rise in data-focused technologies and FAANG companies (Facebook, Amazon, Apple, Netflix, and Google) encouraged teams across their organization to use customer data.<sup>30</sup> In March 2016, there were only 6,500 people on LinkedIn who identified as data engineers, but there were 6,600 data engineer job listings in San Francisco alone.<sup>31</sup> Although the number of data engineers has doubled over the past year, companies are still experiencing a shortage of talent.<sup>32</sup> With tech companies now prioritizing data, organizations are scrambling to hire and retain data engineers.<sup>33</sup>

With data being one of the most valuable assets for a company, data engineers continue to be high in demand. The U.S. Bureau of Labor Statistics reports that database administrator and architect jobs are expected to grow by 8% from 2022 to 2032, which is above average for all occupations.<sup>34</sup> This makes data engineering one of the decade's fastest-growing jobs.<sup>35</sup>

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1Jbf2p9NPmTGuUyaIm5LSvlybLW5ciT-XUhuW4NlesObWAidVOahKkK-9XUBVrcz\_GjA22YVPUo3QEeGabzQ&utm\_content=121425890&utm\_source=hs\_automation.

<sup>27</sup> "Why is it so hard to hire for DevOps?," Stack.io, July 29, 2021, <https://www.stack.io/blog/why-is-it-so-hard-to-hire-for-devops>.

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

<sup>30</sup> Eric Dodds, "The Data Engineering Megatrend: A Brief History," RudderStack, March 12, 2020, <https://www.rudderstack.com/blog/the-data-engineering-megatrend-a-brief-history/>.

<sup>31</sup> "The State of Data Engineering," Stitch, March 2016, <https://www.stitchdata.com/resources/the-state-of-data-engineering/>.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid.

<sup>34</sup> Sophie Magnet, "The Data Engineer Job Market in 2024 [Research on 1,000 Job Postings]," 365 Data Science, May 8, 2024, <https://365datascience.com/career-advice/data-engineer-job-market/>.

<sup>35</sup> Ibid.



However, there's currently a shortage of data engineers, with an average of 2.5 data engineer candidates per job listing on LinkedIn in February 2020.<sup>36</sup> With more demand than supply, data engineers are able to ask for increased compensation, and they're not afraid to do so. Nearly half (42%) of data engineers say they're most likely to decline a job offer because their salary and benefits are below market rate.<sup>37</sup>

## Machine Learning Engineer

Machine learning engineers have been a rapidly growing career as far back as 2015. From 2015 to 2018, machine learning engineering job postings on Indeed grew by an astounding 344%, which far surpassed the growth of other rising engineering roles such as full-stack developers.<sup>38</sup> The appetite for machine learning engineers hasn't slowed down since then. With the rise in AI, it's no surprise that machine learning engineers are one of the fastest-growing job titles over the past five years according to the 2022 LinkedIn Jobs on the Rise list.<sup>39</sup>

As we're witnessing a boom in demand for AI roles right now, it's becoming more difficult for companies to hire. There are more companies that are working on AI than before. Also, AI has historically been more academic than commercial, which has led to a shortage of experienced technical AI talent.<sup>40</sup> As a result, some companies are struggling to hire both senior and junior talent, and candidates can afford to be picky about compensation and where they choose to work.<sup>41</sup>

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<sup>36</sup> Ravi Hulasi, "There's a Data Engineer Shortage: 4 Reasons Why," Tamr, June 9, 2022, <https://www.tamr.com/blog/theres-a-data-engineer-shortage-4-reasons-why>.

<sup>37</sup> Radu Poclitari, "How to hire outstanding data engineers: the definitive guide," Index.dev, February 15, 2024, <https://www.index.dev/blog/how-to-hire-outstanding-data-engineers-the-definitive-guide>.

<sup>38</sup> Louis Columbus, "Machine Learning Engineer Is The Best Job In The U.S. According To Indeed," Forbes, March 17, 2019, <https://www.forbes.com/sites/louiscolumbus/2019/03/17/machine-learning-engineer-is-the-best-job-in-the-u-s-according-to-indeed/>.

<sup>39</sup> "LinkedIn Jobs on the Rise 2022: The 25 U.S. roles that are growing in demand," LinkedIn, January 18, 2022, <https://www.linkedin.com/pulse/linkedin-jobs-rise-2022-25-us-roles-growing-demand-linkedin-news>.

<sup>40</sup> Martin Coulter & Beatrice Nolan, "There's a talent shortage of machine-learning engineers right now as demand for AI specialists booms," Business Insider, March 2, 2022, <https://www.businessinsider.com/there-is-a-machine-learning-talent-shortage-2022-2>.

<sup>41</sup> Ibid.

# How AI Is Shifting Software Engineer Compensation

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With the boom in AI, AI-related roles are increasing in demand and companies are paying a premium due to the shortage of qualified candidates. As of January 2024, AI-related job postings on Indeed increased by 15.7% in the past six months while software engineer and developer listings decreased by 2.9%.<sup>42</sup>

For companies who are looking to hire AI engineers, how much should you be ready to pay?

OpenAI has made the news for its incredibly high salaries. The typical compensation for a level five engineer with 10 or more years of experience is about \$925,000, which consists of a median \$300,000 base salary and \$625,000 in stock-based compensation.<sup>43</sup> Some higher-level engineers are paid as much as \$1.4 million.<sup>44</sup> On the other hand, the lowest reported salary was \$210,000 for a software engineer with two to four years of experience.<sup>45</sup>

While some articles say that salaries from large tech companies such as Apple and Alphabet pale in comparison to what OpenAI is providing, the reality is that base salaries for AI engineers isn't significantly more than that of a traditional software engineer.<sup>46</sup>

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<sup>42</sup> Nate Rattner, "AI Talent Is in Demand as Other Tech Job Listings Decline," The Wall Street Journal, last updated March 5, 2024, <https://www.wsj.com/tech/ai/ai-jobs-demand-tech-layoffs-5b7344c0>.

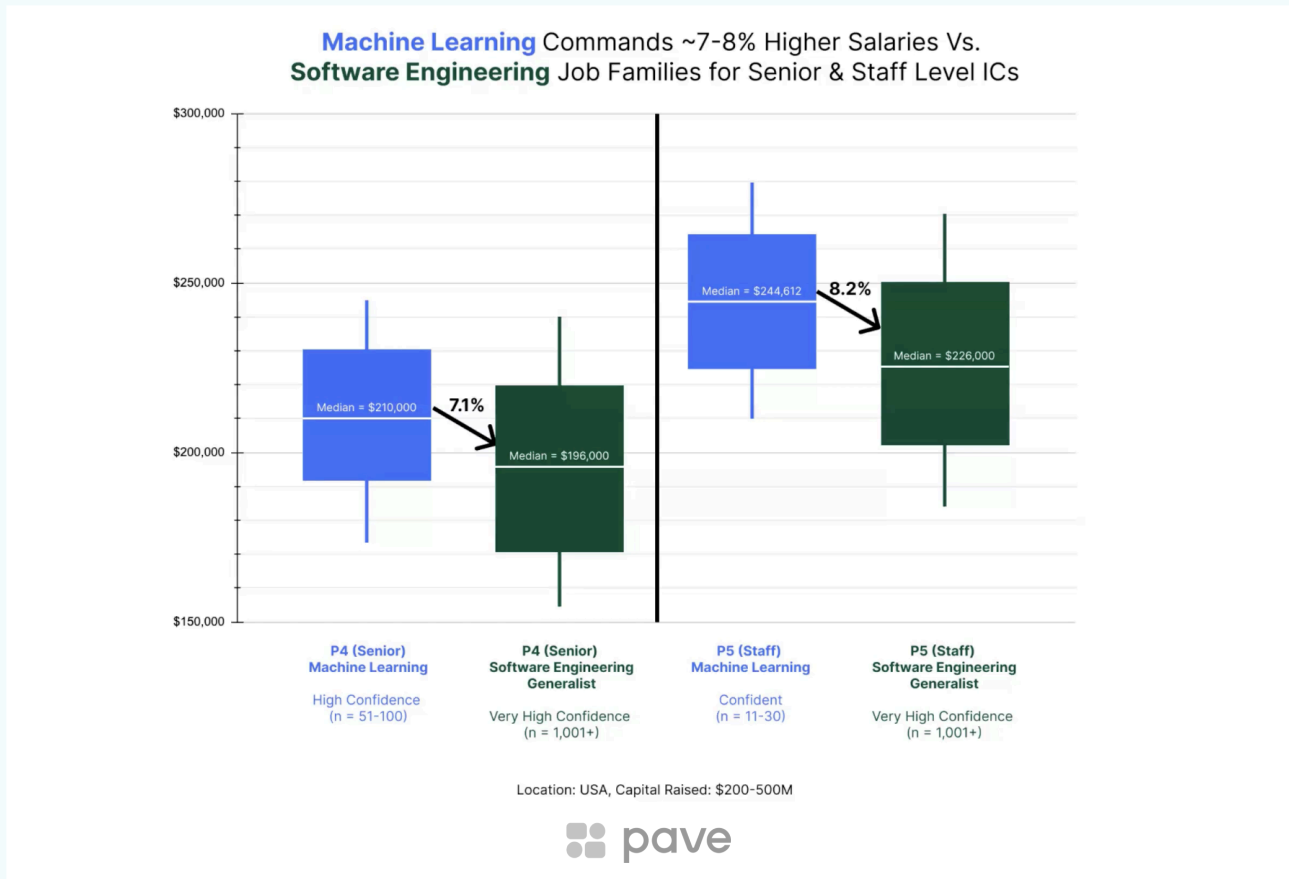
<sup>43</sup> Max A. Cherney, "The typical OpenAI engineer makes \$925,000," Bay Area Inno, last updated June 26, 2023, <https://www.bizjournals.com/sanfrancisco/inno/stories/news/2023/06/26/open-ai-is-paying-3x-the-industry-median.html>.

<sup>44</sup> Ibid.

<sup>45</sup> Ibid.

<sup>46</sup> Adam Eckert, "OpenAI's Gigantic Salaries Are Making Apple, Google, Microsoft Pay Look... Meh," Benzinga, November 7, 2023, <https://www.nasdaq.com/articles/openais-gigantic-salaries-are-making-apple-google-microsoft-pay-look...-meh>.

Figure 1



Of course, there are outliers when it comes to compensation. However, compensation for the majority of the market is only slightly higher than software engineering generalist roles. Pave finds that senior- and staff-level machine learning engineers only have a base salary that's 7% to 8% higher than that of a software engineer of the same level. This will likely change fast though, as Pave's data shows leading indicators that there's a lot of demand for machine learning, which can drive up salaries further.


Companies should also keep in mind that not all AI roles are created equal. Within machine learning, there are specialty skill sets that only a few people have, so those jobs come at a much larger premium.

Additionally, base salary is only one part of the compensation package. Equity is likely where there's more differentiation between machine learning engineers and software engineering generalists. "Equity is the real differentiator for technical talent in general and definitely in the world of AI," said Matt Schulman, Founder and CEO of Pave.

# Software Engineer Salaries in the United States by Level

As software engineers gain more experience or step into management roles, their salary naturally increases. While every company structures job levels differently, Pave’s framework consists of 10 levels. Each level is denoted by its track (P for Professional and M for Management) and its hierarchical level, as denoted by a number. The higher the number, the more senior the role. These levels also correspond to Entry, Mid, Senior, Manager, and Director levels.

Table 3: Level	Median Salary
P1 (Entry)	\$115,416
P2 (Mid)	\$146,062
P3 (Mid)	\$166,000
P4 (Senior)	\$187,500
P5 (Senior)	\$219,350
P6 (Senior)	\$250,000
M3 (Manager)	\$206,078
M4 (Manager)	\$226,344
M5 (Director)	\$240,000
M6 (Director)	\$293,500



# Software Engineer Salaries by City in United States

Cost of living plays a factor in determining engineering salaries, with less expensive locations generally reflecting lower salaries and more expensive areas reflecting higher salaries. The lowest median salary for a mid-level software engineer is \$130,000 in Omaha, Nebraska, where the cost of living is 7% less than the national average.<sup>47</sup> On the other hand, the highest median salary is \$189,000 in New York City, which is known for being the most expensive U.S. city to live in.<sup>48</sup>

<sup>47</sup> “Cost of Living in Omaha, Nebraska,” Payscale, <https://www.payscale.com/cost-of-living-calculator/Nebraska-Omaha>.  
<sup>48</sup> Donna Levalley & Dan Burrows, “The 10 Most Expensive Cities to Live in the U.S.,” Kiplinger, last updated March 13, 2024, <https://www.kiplinger.com/real-estate/605051/most-expensive-cities-in-the-us>.

**Table 4**

City, State Metro Area	Median Salary (P3)	City, State Metro Area	Median Salary (P3)	City, State Metro Area	Median Salary (P3)
Albany, NY	\$180,000	Dallas/ Fort Worth, TX	\$157,000	Pittsburgh, PA	\$167,000
Atlanta, GA	\$160,872	Denver, CO	\$159,200	Portland, OR/ Vancouver, WA	\$169,832
Austin, TX	\$160,000	Detroit, MI	\$145,906	Research Triangle, NC	\$152,000
Baltimore, MD	\$175,050	Houston, TX	\$165,000	Sacramento, CA	\$175,000
Birmingham, AL	\$168,000	Indianapolis, IN	\$158,000	Salt Lake City, UT	\$151,400
Boston, MA	\$166,500	Nashville, TN	\$159,300	San Diego, CA	\$165,290
Charleston, SC	\$154,716	New Orleans, LA	\$149,350	San Francisco Bay Area, CA	\$184,500
Charlotte, NC	\$159,840	New York City, NY/NJ/PA	\$189,000	Seattle, WA	\$187,000
Chicago, IL	\$163,200	Omaha, NE	\$130,000	St. Louis, MO	\$165,000
Cincinnati, OH	\$156,000	Orlando, FL	\$148,000	Tampa, FL	\$159,650
Cleveland, OH	\$154,500	Philadelphia, PA/NJ/DE/MD	\$156,200	Twin Cities, MN/WI	\$157,267
		Phoenix, AZ	\$148,000	Washington, DC	\$155,000

In the U.S., top hubs for software engineering talent are highly populated cities such as New York City, the San Francisco Bay Area, Seattle, and Boston. Unsurprisingly, these major cities are expensive for people to live in and for companies to operate in, and so they have some of the highest median salaries.

There are also some hubs that have lower-than-expected median salaries. Philadelphia, Washington, DC, Denver, and Dallas all have a median salary under \$160,000, even though they're [top cities for software engineering talent](#). Although there are clear differences in software engineer salaries based on geography, the rise of remote work has narrowed the gap.<sup>49</sup> The gap "between the most expensive U.S. cities and the least expensive shrank by two-thirds between 2019 and 2021."<sup>50</sup> What's causing this? Although the vast majority (84%) of companies still take location into account when deciding on compensation, salaries in lower-paying locations are quickly increasing to meet salaries in higher-paying locations.<sup>51, 52</sup> For example, salaries for tech startup employees in Seattle now match those of employees in San Francisco.<sup>53</sup> Equity gaps tell a slightly different story: Pave data shows that while salary information for engineers is closing, equity as part of total compensation holds a greater value in higher-paying locations compared to lower.

## Top Cities to Hire Elite Software Engineers in the United States

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Elite software engineers are those who perform in the top quartile of the 350,000+ technical interviews that Karat has conducted globally. These candidates command premium compensation and often have the opportunity to choose between multiple competing job offers. The majority of them either come from, or go to, high-bar tech companies, which includes some of the world's most recognizable brands and highest-growth organizations.

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<sup>49</sup> Nick Kolakowski, "Is Remote Work Shrinking the 'Geography Gap' in Tech Pay?," Dice, June 1, 2022, <https://www.dice.com/career-advice/is-remote-work-shrinking-the-geography-gap-in-tech-pay>.

<sup>50</sup> Ibid.

<sup>51</sup> Lucas Mearian, "Remote work spurs a national wage leveling in tech," Computerworld, July 14, 2022, <https://www.computerworld.com/article/1612215/remote-work-spurs-a-national-wage-leveling-in-tech.html>.

<sup>52</sup> Nick Kolakowski, "Is Remote Work Shrinking the 'Geography Gap' in Tech Pay?," Dice, June 1, 2022, <https://www.dice.com/career-advice/is-remote-work-shrinking-the-geography-gap-in-tech-pay>.

<sup>53</sup> Lucas Mearian, "Remote work spurs a national wage leveling in tech," Computerworld, July 14, 2022, <https://www.computerworld.com/article/1612215/remote-work-spurs-a-national-wage-leveling-in-tech.html>.

## Top U.S. Cities to Hire Elite Software Engineers

1. Bay Area	5. Boston	9. Austin	13. San Diego
2. Seattle	6. DC	10. Dallas	14. Minneapolis
3. New York	7. Philadelphia	11. Atlanta	15. Portland
4. Los Angeles	8. Chicago	12. Denver	16. Houston

For decades, industries like big-tech, social media, fintech, and rideshare/delivery services have dominated the market for these sought-after candidates. Over the past year, however, hiring freezes and layoffs have shifted the landscape. In a more volatile economic climate, large enterprises like big banks, retailers, and industrial companies are using stability and job security to attract more top candidates.

Historically, it has been challenging for hiring companies to close these elite candidates. Job offer acceptance rates, also known as “close rates,” historically range between 50% and 55%. This changed over the past year as the labor market tightened and layoffs hit the big-tech organizations that had previously scooped up much of the elite engineering talent. In 2023, the acceptance rate for these candidates climbed to 73%.

## Top Cities to Hire Strong Software Engineers in the United States

Strong software engineers are candidates who fall outside of the top quartile of technical interviews, but they still perform well enough to move forward to the next stage at most companies. Larger enterprise organizations, such as financial services, insurance, healthcare, energy, retail, automotive, telecommunications, and manufacturing, tend to hire from this broader candidate base. They form the backbone of most software engineering teams.



## Top U.S. Cities to Hire Strong Software Engineers

1. Seattle	5. Boston	9. San Diego	13. Minneapolis
2. Bay Area	6. Los Angeles	10. DC	14. Dallas
3. New York	7. Austin	11. Denver	15. Portland
4. Philadelphia	8. Chicago	12. Atlanta	16. Houston

Strong software engineers still have a lot of decision-making power, but much like elite candidates, this group is also accepting jobs at a higher rate compared to previous years. Close rates for strong candidates were over 80% in 2023, up from 66% in 2022 before the labor market started to tighten.

## Conclusion

When putting together compensation packages for software engineers, HR and engineering leaders need to take into account several factors: the type of engineering role, the job level, and the location of the candidate. While companies can use the benchmarks we've provided here to offer market rate salaries, that may not be enough. For engineering roles that are highly competitive, either because these roles work with cutting-edge technology like AI or the supply of skilled candidates is less than demand, companies should be prepared to pay more than the average salary.

By combining salary data with the top cities for hiring software engineers, hiring teams can also strategically identify the best places to recruit from based on their budget and needs. For example, startups that aren't equipped to offer high salaries may want to target cities with strong engineers and a lower median salary.

As compensation for engineers continues to climb and advancements in technology shape demand for specialty skills, and even create new engineering roles, it's important for companies to stay informed on compensation so that you can secure the talent you want.



## About Pave

Pave is the leading data-driven compensation management platform that helps companies benchmark, plan, and communicate compensation. With Pave, leaders can leverage salary, equity, and offer data to build compensation bands, run merit cycles seamlessly, and empower employees to understand the full value of their compensation. Pave is trusted by more than 7,500 of the world's most innovative companies. Learn more at [pave.com](https://pave.com).



## About Karat

Karat makes it easy to hire great engineers. From application to offer, Karat is helping the world's largest companies improve the quality, efficiency, and equity of their technical hiring process. Through innovative assessments, live expert-led technical interviews and unmatched [talent insights](https://karat.com), Karat makes it possible to hire quickly and confidently while giving every candidate an equal opportunity to show what they can do. Learn more about why global leaders like Walmart, Atlassian, and Citi trust Karat to help them hire top talent and build exceptional engineering teams at [karat.com](https://karat.com).