TECH TRENDS
TO WATCH 2020
INSIGHTS FOR IT PROFESSIONALS

NATIONAL

TECH JOB TRENDS

In today's digital age, organizations are only as successful as the technology behind their applications, services, or products. Whether technology is at the center of a business model or merely the backbone for something else, companies increasingly see value from investing in the professionals responsible for driving that technological success.

As a result, the tech hiring landscape is more competitive than ever, escalating the opportunities for incredible tech careers. This often presents a roadblock for hiring managers and an opening for job seekers. But challenges can be overcome and opportunities can be maximized with an improved knowledge of industry trends.

Motion Recruitment's Tech Job Trends Guide gives both technologists and hiring managers the crucial job market information they need to stay ahead of the competition.

The Motion Recruitment network, including Jobspring Partners and Workbridge Associates, is a premier IT staffing agency with offices across 16 North American markets providing solutions for placing Contract, Direct Hire, and Contract-to-Hire tech talent.

WE SPECIALIZE IN:

- Cloud, Network Security & Infrastructure Engineers
- Hardware & Embedded
- ML & Data Engineers
- Mobile Developers
- Project/Product Managers
- Quality Assurance & Test
- Senior Tech Executives
- Software Developers
- UX/UI Designers

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MARKET SHAPING TRENDS

Motion Recruitment aims to share valuable insights regarding key trends contributing to the drastic changes occurring across the technology industry in 2020.

The pages that follow contain insights backed by Motion Recruitment's proprietary data and aim to provide clarity to salary and demand changes in those respective fields.

JOB TREND INSIGHTS

Updating Legacy Systems puts Back End on the Back Burner

The cost of maintaining legacy systems is roughly $300 billion a year, a burden owed largely to developer salaries and dealing with outdated systems, bad software, and broken code. Companies are wising up to this trend, and many firms within government, insurance, and non-profit sectors are rallying to acquire talent that will modernize their outdated technologies. Switching to a newer tech stack improves agility, cost effectiveness, and security, but is creating a skills shortage as the market is not ready to supply the demand at the current growth rates. For example, once Single Page Applications became popular, the back-end became less about generating HTML and more about simply providing data to the front-end. Therefore, there has been a decrease in need for a heavy backend technology like ASP.NET MVC or Core and an increase in need of framework skills such as Angular, Ember, and React, making them the new mainstream. Not only has the number of roles requiring Angular and React increased, but the salaries tied to them have seen a higher growth rate of 8% in contrast to 2% growth rate in heavy back end tech jobs within the last 5 years.

Hiring Managers

With 30% of enterprise staff set to retire in the next 5 years, not only will updating legacy systems reduce cost and security risks, but will attract the younger talent with modern skills quickly making up the majority of the workforce. These days, a company is only as relevant as its systems allow it to be.

Job Seekers

For developers working with these legacy systems, now may be a good time to learn some new skills. However, this doesn't mean starting over with a new engineering degree. Node.js is compatible with most of these legacy systems, which would allow to keep up with the trend.

> "
> *A majority of companies say lack of access to software developers is a bigger threat to success than lack of access to capital.*
>
> - Drew Sussberg, VP

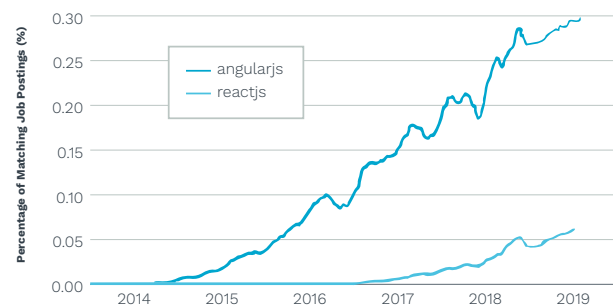## .Net Declining Trend, Javascript Increasing Trend for Last 5

The chart speaks for itself: a decline in .Net positions over the years.

.Net Job Posting Trend

Angular, React Job Posting Trend

Source: Indeed

JOB TREND INSIGHTS

Data Related Jobs Have Increased 56% since 2019

The advent of the digital age has provided companies with powerful ways to collect, interpret for data-driven decision-making. However, in order to fully harness this power, the data must be precise and accurate, if not, the consequences of using stale or inaccurate data may be disastrous. In 2019, several standout trends within markets and enterprises emerged that radically impacted the demand for Data Engineers, Data Scientists, and hybrids of the two. The adoption of human-machine interaction (chatbots and voice-controlled applications), live data streamlining applications, IoT device integration and monitoring, 5G networks, and wearable devices are only a few of the reasons data has become more abundant than ever. The impact of this data surge is visible in all the lines of the data engineering field:

BACK TIER

With an average data growth per company ranging from 1GB to 1TB a day, many companies have shifted their focus in modernizing their infrastructure in order to capture, process, and release data faster. To address organizations' big data implementations, either through migrating data warehouses to Cloud or replacing them entirely with data lakes, **Data Warehouse Specialists, Database Architects, and Data Mining Analysts** have seen a 98% increase in demand.

MIDDLE TIER

In 2019, data pipelines have become more complex, diverse, and abundant, a new type of role emerged drastically. **DataOps Engineers** apply Agile and DevOpS methods to the entire data analytics lifecycle to ensure the constant and consistent delivery of quality data to the end analysts. The entry level salaries for this role can start around $142K on average and may even reach $200K.

FRONT TIER

The proliferation of interconnected devices has resulted in a new wave of data churn up. Businesses envision machines not only being able to comprehend human syntax but also interact with humans in a very natural way. Companies focusing on machine learning and AI report that they have seen an 83% shortage in **Machine Learning Engineers and Audio Signal Processing Engineers** due to a lack of candidates with demonstrated mathematical and statistical competency, expertise in distributed computing, and business acumen. There were 150,000 big data analytics and AI-based jobs waiting to be filled in 2019 with an average salary of 140K a year.

Hiring Managers

Advances in machine learning and AI tooling have decreased the barriers to entry for these roles. Make great additions to your team by on-boarding candidates with direct experience in ML and AI, rather than headhunting generic PhDs and math professionals without these skills!

Job Seekers

Business analysts, in particular, are in a great position to capitalize on this trend by upgrading their mathematics skills geared towards transitioning into machine learning and algorithms.

JOB TREND INSIGHTS

Tech Architects: The Modern "Jack of All Trades"

With organizations increasingly turning to microservices architecture for flexibility and efficiency, the demand for software architects has made it one of the fastest growing tech skill sets in 2018 and 2019. Microservices allow for applications to be updated in smaller segments, which creates a much more agile environment than having to overhaul an entire system every time a small change is needed. Even larger companies are starting to turn to this structure to compete with successful startups and midsize companies. Segmented services, with out a calculated design connecting everything together, result in a messy architecture. A messy architecture then can have the opposite effect of what microservices is intended to accomplish, creating data redundancies and slowing processes and teams. For this reason, architect roles are on the rise, growing 26% percent more than other professional tech roles. The charts below indicate that not only the number of architecture roles but also the salaries tied to them have grown significantly over the last year. The composition of developers and architects in organizations is also shifting as companies realize the importance of master planning.

Hiring Managers
For organizations looking to gain an edge over the competition where speed is key, a microservices architecture would most certainly be advantageous. Contact us to hire a competent architect to lay the ground work for technical success.

Job Seekers
For developers looking to enhance their earning potential who enjoy modeling, management, and design, a software architect path might be something to consider.

Architect Roles

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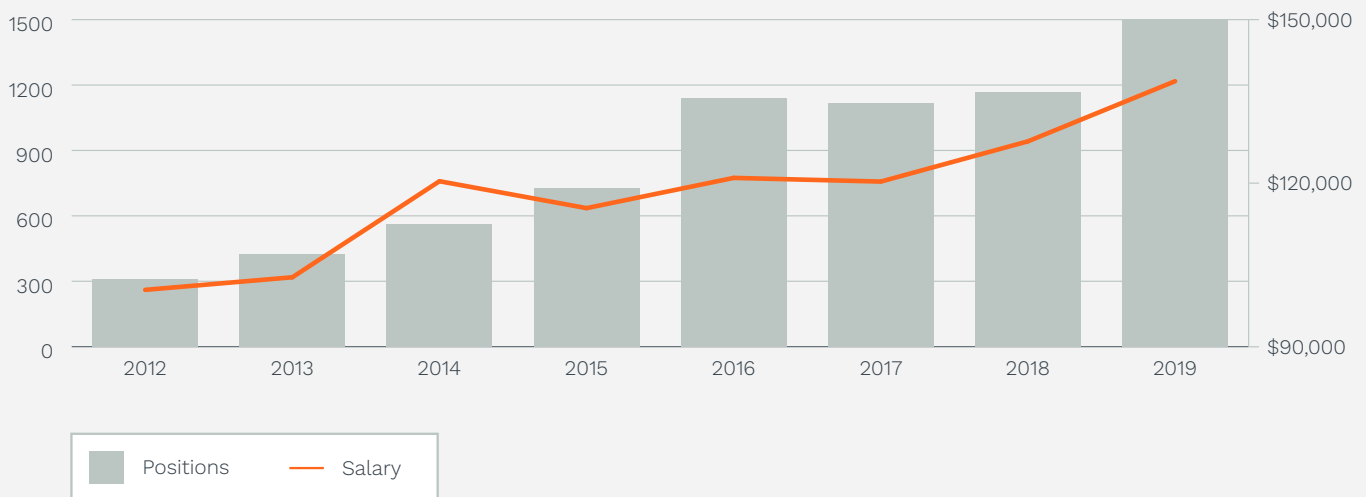
ABOUT US

Tomorrow is waiting.
Let's go.

The Motion Recruitment network, including Jobspring and Workbridge, provides premier IT staffing solutions (Contract, Contract-to-Hire, and Direct Hire) across 16 North American markets: Boston, New York, Philadelphia, Washington, D.C., Atlanta, Chicago, San Francisco, Silicon Valley, Los Angeles, Orange County, Charlotte, Phoenix, Greenville, Dallas-Fort Worth, and Toronto.

Motion Recruitment offers a unique and deep expertise in finding and placing candidates with the highest in demand tech skill sets, such as UI/UX, Open Source, Microsoft Development, Network Security & Infrastructure, and Mobile Development.

Our high-touch, specialized and team-based recruitment model, paired with our deep networks and knowledge of our local technology markets, result in an exemplary track record. Motion Recruitment is also the proud creator of Tech in Motion, a national tech event series that connects nearly 200,000 tech enthusiasts to meet, learn, and innovate.

Hiring Managers

Contact one of our Recruiting Managers to request more information about local talent availability.

Job Seekers

Visit our website to find information about open roles in your local market.