

**INDEX 2024** 







## **2024 Equation for Equality Index**

This report updates the data from NPower and Lightcast's original Equation for Equality research. It highlights trends that reflect the representation of women, particularly women of color, in tech and underscores the importance of NPower's Command Shift Coalition's work.

#### The Good News:

For the first time, Black, Latina and American Indian women represent over 6.5% of tech jobs overall, with a slight increase in software developers roles. Additionally, women of color are now occupying a wider range of tech roles than ever before.

While degree biases still dominate in certain areas, like cyber and AI, there has been a decrease in credentialing for roles such as computer support specialists, operations research analysts, software developers, and database administrators.

Currently, there are 1.9 million software developer job openings, with starting salaries just over \$100K/year. This field is expected to add 344,000 jobs over the next five years.

## The Opportunity:

To create a more inclusive tech industry, companies should establish clear pathways to ease entry into tech roles, explore down-credentialing opportunities, and leverage resources like NPower's Diversity Directive to increase women's representation in tech and foster a culture of inclusion and belonging.

## **KEY FINDINGS**

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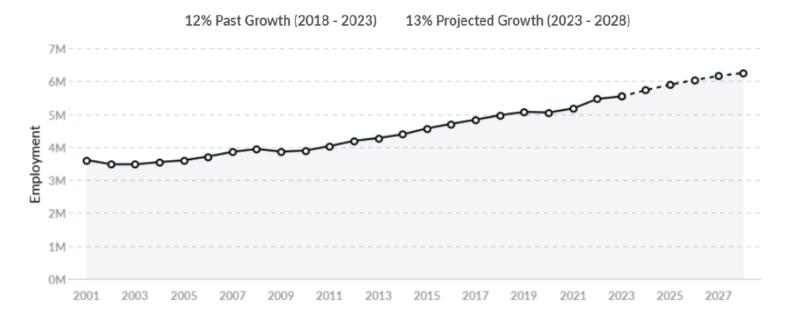
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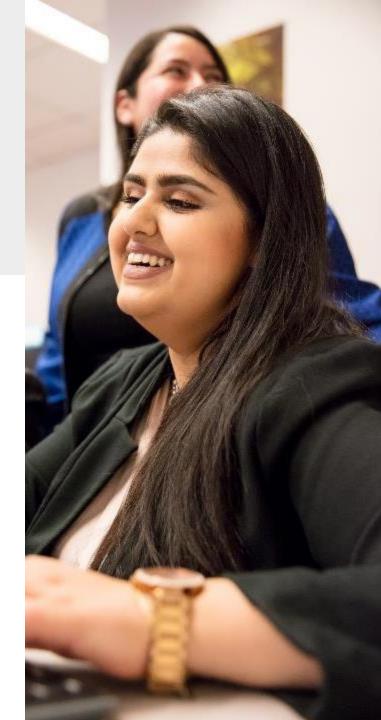


# The Tech Sector is Thriving and Growth is not Slowing Down

The Tech Industry is expected to grow by 13% between 2023 and 2028.

## Tech Sector Growth over Time





## **COMMAND SHIFT**

The number of underrepresented women of color in tech is increasing. With more than 300k in computing related roles, the representation of women of color in tech is above 6.5% for the first time.







The Command Shift Coalition is committed to increasing the number of women of color in tech to 10% by 2030.

Despite small gains, the sector has only seen a ½ percentage increase in 2 years.

To achieve the Coalition's goal, the percentage of women of color in tech will need to increase by more than ½ percent every year between now and 2030.



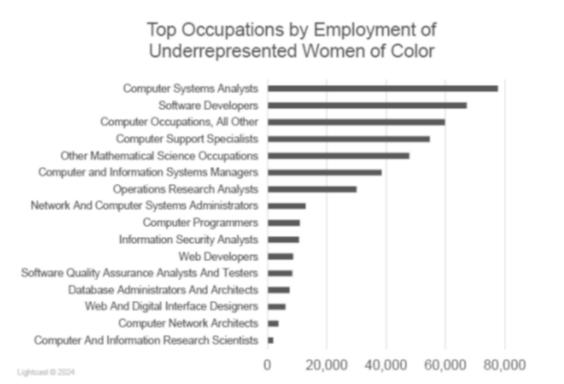
To see growth in the number of women, and especially women of color in tech, women will need to be employed in a wider range of tech jobs.



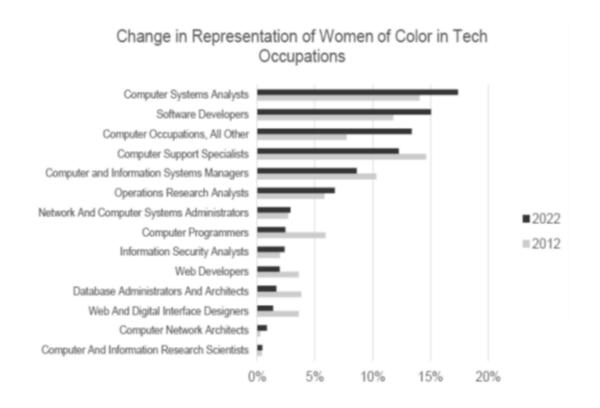


## **Expanded Job Roles for Women of Color**

Underrepresented WOC are employed in a wider range of tech jobs today than in the past.



Representation is *down* in a handful of high-paying, senior tech jobs, such as computer programmers, there was a slight increase Software Developers and Computer System Analysts



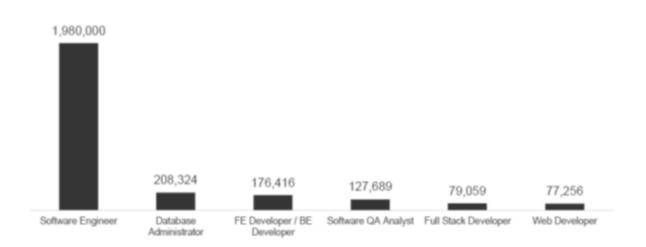
## Career Pathways for Software Developers

Nationwide, underrepresented women of color make up 1.9% of the Software Developer workforce.

## There are 1.9mm postings for software developers – a very high demand!

Setting clear career pathways can help ease the entry for underrepresented women of color into high-paying occupations. Software Engineers are in high demand nationwide.

### National Demand for Feeder Occupations





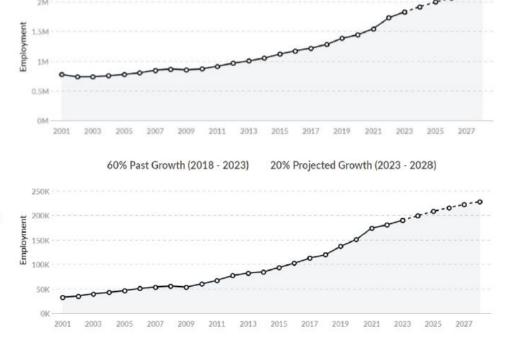
## Command Shift is in Lock Step with Employer Demand

The Command Shift
Coalition's Path2TECH
program, a Full Stack
Developer training
program for women, is in
alignment with the industry's
demand for software
development roles. NPower
also continues to provide
women with the opportunity
to upskill in Cybersecurity
through Advanced Training
Programs.

**Software Developers** are projected to add 344,000 jobs over the next five years

**Information Security Analysts** are projected to add 38,000 jobs over the next five years

And cybersecurity is becoming more and more relevant for a large swath of tech and non-tech careers.



19% Projected Growth (2023 - 2028)

43% Past Growth (2018 - 2023)

# Software Development and the Growth of Artificial Intelligence

Artificial intelligence is growing at an accelerated pace. Occupations like **Software Developers** and **Data Scientists** are in high demand.

From January 2022 to March 2024, there have been 1.49M unique Al-related postings, with over 57,950 employers competing for talent. This is a 73% increase when looking at demand between 2020 and 2021.

The top occupations demanded are:

- Software Developers
- Data Scientists
- Database Administrators
- Database Architects
- Marketing Managers

| Top 10 Skills Demanded | Projected Growth |
|------------------------|------------------|
| Machine Learning       | 19.9%            |
| Python                 | 24.5%            |
| Computer Science       | 26.8%            |
| SQL                    | 6.4%             |
| Data Analysis          | 25.8%            |
| Data Science           | 17.4%            |
| Agile Methodology      | 19.8%            |
| Amazon Web Services    | 24%              |
| Automation             | 30.5%            |
| Apache Spark           | 14.7%            |

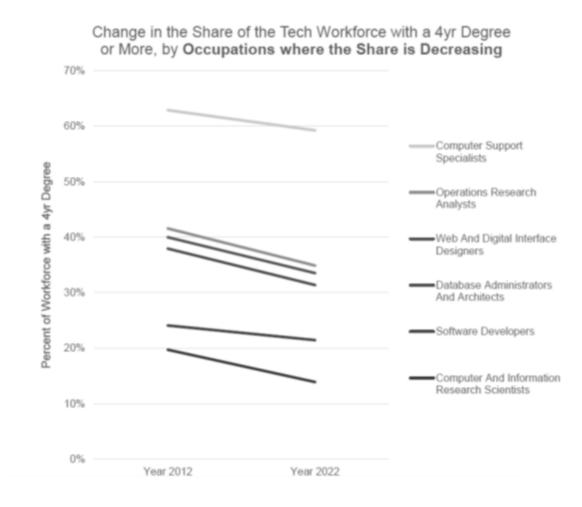
Down credentialing presents opportunities for more women in skill-similar roles to pursue careers in technology.





# Certain occupations are seeing significant down-credentialing

There has been a change in the share of tech workers with a 4-year degree or more. Occupations like Software Developers,
Computer and Information
Research Scientist, as well as
Database Administrators and
Architects have seen significant shifts in down-credentialing.





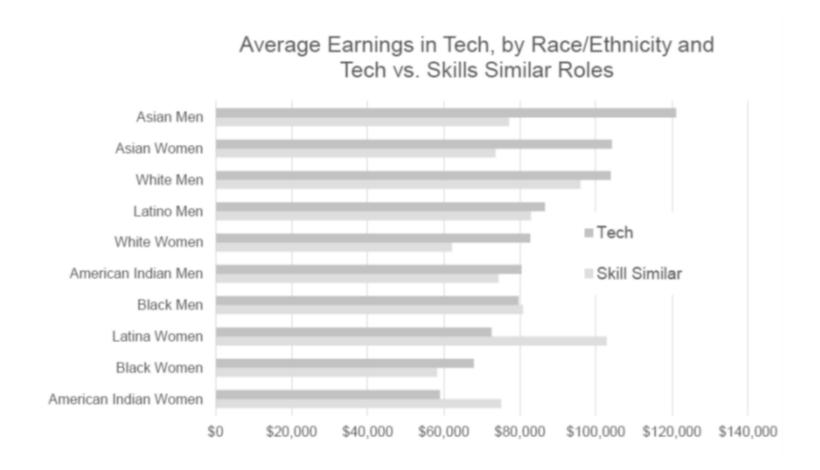
Tech continues to offer a significant salary premium across demographics, but wage disparities persistespecially for Black and Latina Women.



## Salary Trends and Economic Mobility

Black women in Tech earn 17% more than their non-tech peers, while Latina women still face significant wage gaps.

Latina women working in tech jobs tend to earn far less than their peers in non-tech jobs.



# **Equation for Equality Index:**Call to Action



**Support Down-Credentialing:** To address barriers faced by women in tech, employers should rethink traditional tech hiring practices. By reducing degree requirements and focusing on skills and competencies, we can tap into a more diverse talent pool ready to enter, persist, and thrive in tech roles.



Build Clear Tech Pathways: Invest in and support programs that create structured tech career pathways, like NPower's Path2TECH Full Stack Development program. These programs equip women with indemand skills and provide them with access to highgrowth, high-paying tech careers, ensuring more inclusive representation in the industry.



Leverage Resources like the Command Shift Coalition's Diversity Directive: Utilize the Command Shift Coalition's Diversity Directive to guide organizational inclusion and belonging efforts. This resource offers actionable insights for businesses committed to increasing representation and driving cultural change.



Collaborate with the Command Shift Coalition:
Partner with initiatives like Command Shift to amplify the collective impact of increasing the representation of women in tech. Coalitions bring together employers, nonprofits, and educators to address systemic barriers and create sustainable solutions.



# REGIONAL UPDATES

NPower's updated *Equation for Equality Index* highlights both progress and opportunities for increasing the representation of women in tech. In the 2024 report, NPower takes a closer look at regions where the new Path2TECH Full Stack Developer training program is being piloted.

The regional profiles for **Atlanta**, **Dallas**, **the DC area**, and **New York** showcase key tech insights for women, including women of color. In Atlanta, the tech sector has grown by 78% over the last decade, with over 23,000 women of color in the field. Washington DC boasts 38,000 women of color in its tech workforce, reflecting strong gains.



## **Atlanta:**

## The Tech Sector in Atlanta Continues to grow with nearly 200k tech workers. This workforce includes 23,000 women of color.

### Overview:

Atlanta is a standout region for women, particularly women of color in tech, with 12% of the tech workforce being women of color—almost double the national average.

Atlanta is also closer to parity with its tech enabled, skills-similar talent pool, with 19% women of color, higher than the national average.

There are currently 3.1k employers competing for Cyber talent in the Atlanta region with an advertised salary of \$125k.

## Highlights:

Women remain significantly underrepresented in tech.

There is currently a COVID era backslide in Atlanta, with the representation of women of color down in tech between 2021 and 2022. This could potentially undo gains achieved between 2017 and 2019.

Among women of color in Atlanta, Black Women still hold the most tech jobs.

Atlanta has, however, seen Latina women's representation in tech increase from 1% to 2%.

### **Occupations Driving the Change:**

Atlanta is seeing *increased* representation of women of color among Operation's Research Analysts, Web Developers, and Computer Systems Analysts.

Representation is **down** in a handful of high-paying, senior tech jobs including Software Developers and Computer programmers. Representation is also lagging in cybersecurity roles.

Database Administrators and Software Engineers experience the *highest demands* in the region. Setting clear career pathways can help ease entry for underrepresented women of color into high-paying occupations.



## Dallas:

There has been rapid and continuous growth in the Dallas Tech sector with 265k workers. This workforce includes 24k women of color.

#### Overview:

Dallas has seen rapid growth in tech, with an 84% increase in tech employment over the last decade. Dallas is seeing the highest rate of increase for women of color, compared to other regions (Atlanta, DC, and New York).

Currently, **9% women of color are represented in Dallas' tech industry.** The share of jobs held by women of color has slightly increased in Dallas' tech sector and within the full talent pool of tech-eligible, skills-similar jobs.

There are currently **3k employers competing for Cyber talent in the Dallas region with an advertised salary of \$125k.** 

## Highlights:

Underrepresented women of color have increased significantly since 2016, with a large spike between 2021 and 2022. The share of women of color in tech has increased 1.5x over the last decade.

Among underrepresented women of color in Dallas, Black women hold the most tech jobs.

Although underrepresented in Dallas' tech sector, Latina women experienced a considerable increase between 2021 and 2022, now representing 5% of Dallas' tech workforce.

### **Occupations Driving the Change:**

Overall, there has been an increase in representation for women of color in most tech occupations.

Setting clear career pathways can help ease the entry for women of color into high-paying occupations. Database Administrators and Software Engineers experience the highest demand in the region.



# Washington DC: Tech Employment growth in DC over the last decade has been strong but may be leveling off. There are 342,000 workers in DC tech sector. This workforce includes 38k women of color.

### Overview:

Underrepresented women of color has held a relatively stable share of tech jobs over the last decade, and is slightly under its pre-Covid heights.

Currently, 11% women of color are represented in DC's tech industry.

There are currently 4k employers competing for Cyber talent in the DC region with an advertised salary of \$128k.

## Highlights:

Among underrepresented women of color in DC, Black women hold the most tech jobs.

Latina women would need to **double** their share of tech jobs in order to reach parity with the full tech-enabled talent pool.

### **Occupations Driving the Change:**

Increased representation among Operation Research Analysts and Other Mathematical Science Occupations, as well as other miscellaneous level tech jobs, is driving the increase in underrepresented women of color in tech.

Representation for women of color has gone *down* in the past decade in a handful of high-paying, senior tech jobs, including Software Developers and Computer Programmers.

In DC, underrepresented women of color make up 8% of the Software Developer workforce. Setting clear career pathways can help ease entry for women of color into high-paying occupations. Database Administrators and FE/BE Developers are currently experiencing the highest demand in the region.



## **New York City:** There are 536k workers in New York's tech industry, including 32k women of color.

### Overview:

Women of color represent a smaller percentage of workers in New York's tech sector when compared to other regions.

There has been a slight *decrease* in the percentage of underrepresented women of color between 2021 and 2022.

Women of color have held a stable share of tech jobs over the last decade, increasing from 5% of New York's tech population to 6%.

There are currently 4.7K employers competing for Cyber talent in the region with an advertised salary of \$136K.

## Highlights:

Among underrepresented women of color in New York, Black women hold the most tech jobs.

Latina women need to increase their representation by 190% in order to reach parity with the full tech – enabled talent pool.

## **Occupations Driving the Change:**

Increased representation among Operation Research Analysts, Computer Systems Analysts and Other Mathematical Science Occupations, as well as other miscellaneous level tech jobs, is driving the increase in underrepresented women of color in tech.

Representation also increased in higher-paying, senior tech jobs, including Software Developers and Computer Programmers.

In NY, underrepresented women of color make up 8% of the Software Developer workforce, the highest of all of NPower's profiled regions.

Setting clear career pathways can help ease the entry for underrepresented women of color into high-paying occupations. FE/BE Developers and Software Engineers experience the highest demand in the region.





Equation FOR Equality