



### **BACKGROUND AND RESEARCH METHODS:**

- ✓ My project is focused on the participation of women and African Americans in science, technology, engineering, and math (STEM) fields within the private sector. It uses publicly available surveys and qualitative data to examine current trends in the sector's diversification and what barriers remain that might hinder further progress. In addition, I conducted interviews with individuals within these populations and working for a STEM-focused company.
- ✓ Many studies have documented the shortage of African Americans and women employed within STEM industries compared to their representation in society. For example, one report stated, "nationally, Black or African American workers represent 13 percent of the U.S. workforce and 8 percent of tech occupations. This gap signals underrepresentation in the tech workforce". Many prominent techfocused corporations have declared goals of improving representation of women and minorities in their workforce. Here I am examining whether we have seen real progress in the private sector.
- $\checkmark$  Through the interviews I hoped to gain insights into their mentorship experiences and preferences regarding having mentors who are gender and ethnicity matched. In addition, I want to better understand the barriers to employment they may have experienced during their career. It is well documented, especially African Americans, have had limited educational opportunities and been the subject of prejudice inhibiting their employment.

POTENTIAL IMPROVEMENT IN DIVERSITY



The tech industry has pledged to increase racial and gender diversity, but people of color and women of color, in particular, have been excluded from this progress.

Black people comprise 13% of the U.S. population, but only:

Between 2014-2020, Black representation in tech increased: +1%

On average, Black tech workers' salaries are less than white tech workers' salaries for the same roles:





of the tech workforce



of tech executive



of tech founders

# EXAMINING TRENDS WITHIN MINIORITY PARTICIPATION WITHIN TECH-FOCUSED INDUSTRIES DIAMOND SCRIVENS SCHOOL OF INFORMATION FSU TECH FELLOWS

### MINORITIES IN TECH





65% of PoC think there are more PoC in tech now than 10 years ago ...



58% of white **respondents** think there are more PoC in tech now than 10 years ago ...





## **ANALYSIS AND CONCLUSION:**

✓ Interviewees were recruited through my summer internship, through FSU Tech Fellows, with North Florida Innovation Labs, a STEM-focused business incubator. Minority employees of STEM-focused companies were specifically recruited. Working at a STEM incubator can get busy. So, I knew that I would have to keep the questions to a minimum but still in-depth for one to be able to elaborate. All participants were African American.

 $\checkmark$  Increasing the representation of women and people of color in STEM fields can help increase diversity, creativity, and innovation within a company. My desk research and my interviews highlighted how Black and Latino students are more likely to come from low-income families and often lack the education support to pursue a STEM career. They might not have access to the academic resources that traditionally help support students through to completion. My desk research and interviewees highlighted the importance of targeted STEM education as having significant impact on empowering Black students to pursue a STEM career. The article "African Americans, STEM, and Entrepreneurship: A Study of Factors That Influence African Americans to Pursue Entrepreneurship in STEM Fields" states that "programs can offer other structural supports, such as financial capital, that address historical deficits that have served as barriers in **STEM programs and entrepreneurship".** 

Well designed STEM education programs integrates the four subjects into a cohesive, interdisciplinary, and applied learning approach. STEM education includes the appropriate real-world application and teaching methods. As a result, students in any subject can benefit from STEM education. Environmental and psychological factors associated with participants' decision to pursue STEM, such as family influences, academic mindsets, and attitudes towards STEM, were also studied. This study contributes additional information on the views and experiences of diverse students actively pursuing STEM. Most participants indicated the importance of meeting and being mentored in STEM by those of their same gender and ethnicity, either in person or through media. Future educational efforts to increase STEM diversity should consider students' mentorship preferences and facilitate interactions with matched-background mentors regarding media use. The article "Diversity In High Tech," states. "It has been noted that there are almost twice as many job postings in STEM fields as there are qualified applicants to fill them. A call to action is needed for expanding STEM education for women and Black people will help full fill these job needs. This will enhance and help businesses thrive in STEM industries to help narrow the gender pay gap and ensure a diverse and talented STEM workforce and prevents biases.

### REFERENCES

(OpenAthens: 400, n.d.). (Report Documents the Employment Shortfall of African Americans in the Tech Workforce, 2021) (Black Workers in Silicon Valley: Macro and Micro Boundaries, n.d.) (DIVERSITY IN HIGH TECH, n.d.) (DIVERSITY IN HIGH TECH, n.d.) (London, 2020) (Black Workers in Silicon Valley: Macro and Micro Boundaries, n.d.)