

Increasing Diversity and Inclusivity in the Cyber Talent Pipeline

Spotlight on CyberHire and NFAR Cyber



San Diego
Workforce
Partnership

NFAR



SAN DIEGO REGIONAL
EDC

About Us

- San Diego Workforce Partnership
 - A non-profit which creates opportunity through work, supporting job seekers and businesses with a robust suite of resources and services.
- Cyber Center of Excellence (CCOE)
 - A nonprofit that mobilizes businesses, academia and government to grow the regional cyber economy and create a more secure digital community for all.
- San Diego Regional Economic Development Corporation (EDC)
 - An independently-funded economic development organization that mobilizes business, government, and civic leaders around an inclusive economic development strategy in order to connect data to decision making, maximize regional prosperity, enhance global competitiveness, and position San Diego effectively for investment and talent.

Cybersecurity in San Diego – By the Numbers



\$3.5B

ANNUAL
ECONOMIC IMPACT

nearly 15% more than
in 2019

23.4K

TOTAL JOBS
IMPACTED

10% increase since 2019

874

CYBER FIRMS CALL
SAN DIEGO HOME

3 in 5 expect to increase
employment in next year



12.4K

TECH WORKERS
ENGAGED IN CYBER

7.5% more than in 2019

\$106.4K

AVG SALARY FOR
TECH & CYBER
WORKERS

nearly 12% above national avg

22.2K

CYBER-RELATED
DEGREE COMPLETIONS

across 118 local programs

Talent Pipeline Management

- The U.S. Chamber of Commerce Foundation developed Talent Pipeline Management® (TPM) to advance authentic employer leadership in building high-performing talent pipelines.
- Designed to be a scalable, authentically employer-led solution designed to close the skills gap.



CyberHire: Work With Employers



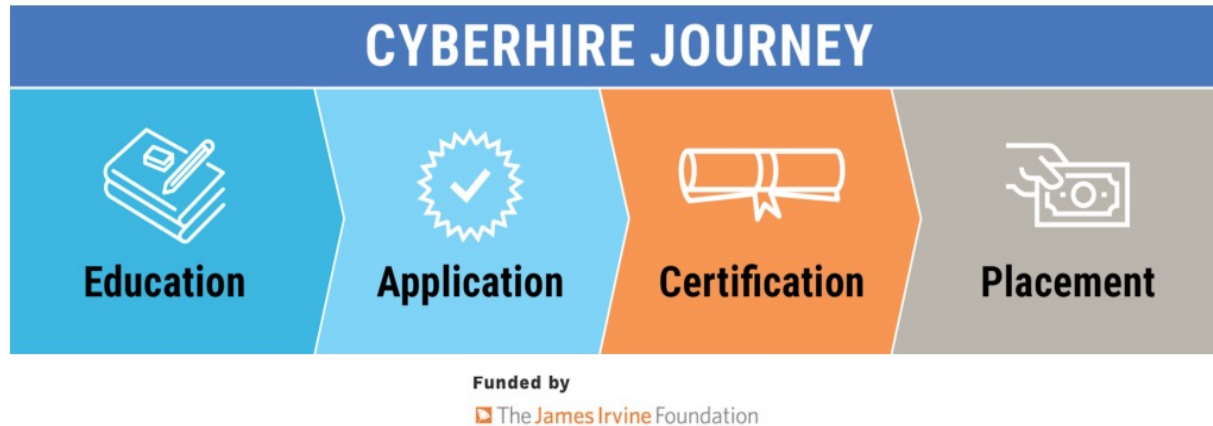
- **Step one: Host an employer working group**
 - 10 San Diego employers tasked with developing consensus on the fundamental skill requirements for entry-level roles.

CyberHire: Engage Academia



- **Step two: Verified program process**
 - Education providers throughout San Diego applied and 5 designated education providers were selected over two rounds.
 - They were vetted by the employer working group and selected based on their ability to teach to the core skills required.

CyberHire: Identifying Students and Job Seekers



■ Step three: CyberHire

- Students at one of the verified programs are invited to apply to CyberHire.
- The application process screens for folks who are CalFresh/SNAP Participants or fall within the low-moderate income bracket.

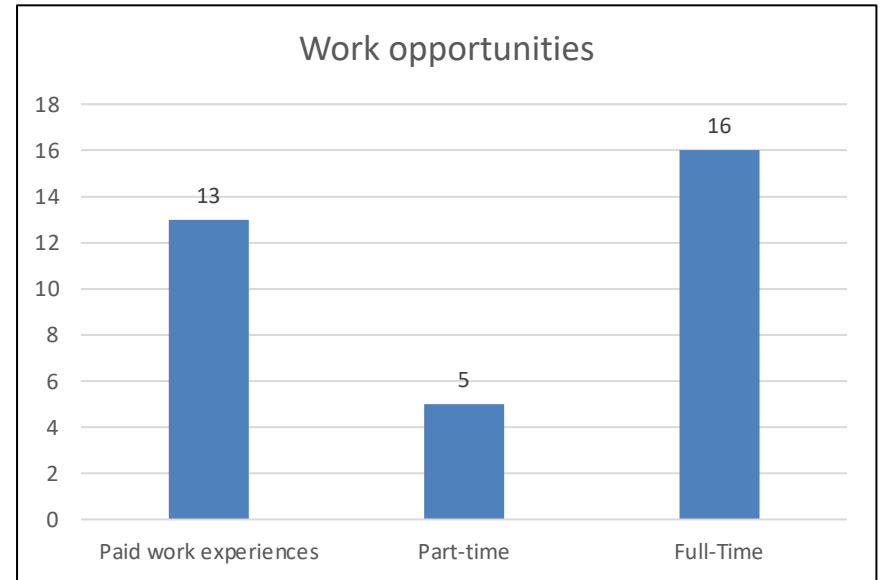
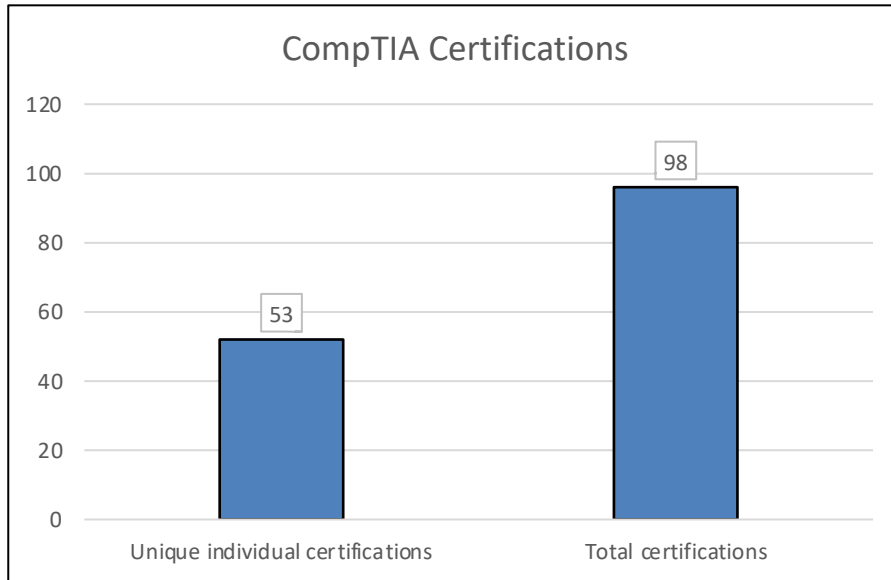
Opportunities for Systemically Marginalized Communities

- Talent Pipeline Management and Opportunity Costs
- Certification vouchers
- Job placement assistance
 - Paid work experiences
 - Long-term employment
- Supportive Services



Key Takeaways and Lessons Learned

193 participants to date!



- Employer buy-in and strong institutional partnerships
- The skills gap and overcoming it
- Robust case management
- Diversity, equity, and inclusion and its importance in cybersecurity
- Have our base line – ready to find partners for scaling up

Case Study: Ally

- 61-year-old woman
- Bachelors in archeology and theater
- Sales associate at \$14/hr.
- Back to school in 2018 – enrolled in CyberHire early 2022
- Received her CompTIA A+ and Network+ Certifications
- Did a paid work experience



Ally landed a job as a
Cloud Run Operator in
April 2023 making \$85,000
a year plus benefits!

NFAR Cyber: Job Readiness for Neurodiverse Populations



- CCOE and industry partners are working with NFAR to pilot “NFAR Cyber” – a cybersecurity neurodiversity training and internship program for adults with cognitive exceptionalities modeled after NFAR’s successful NFAR Tech program.
- 9-month Integrated Technical Training Program based on industry standard CompTIA curriculums to ensure the technical material is fully covered and provides an opportunity for participants to demonstrate their knowledge of the subject matter with industry recognized certification (A+, N+, and Security+).

About NFAR

- NFAR is a San Diego-based nonprofit organization that has been working to improve the lives of those with autism for the past 20 years with a focus on flipping the script on autism the current 85% autism unemployment rate.

NFAR TECH

A comprehensive training program for entry-level QA in software development

NFAR CYBER

A cybersecurity vocational training program based on industry standard CompTIA curriculums

NFAR WORKS

Light industrial training program for people with autism.

NFAR TALENT

Corporate Neurodiversity Training and
Your trusted partner in neurodiversity hiring.

NFAR's Cyber Training Model

Certifications

- CompTIA A+
- CompTIA N+
- CompTIA S+
- CompTIA CySA+

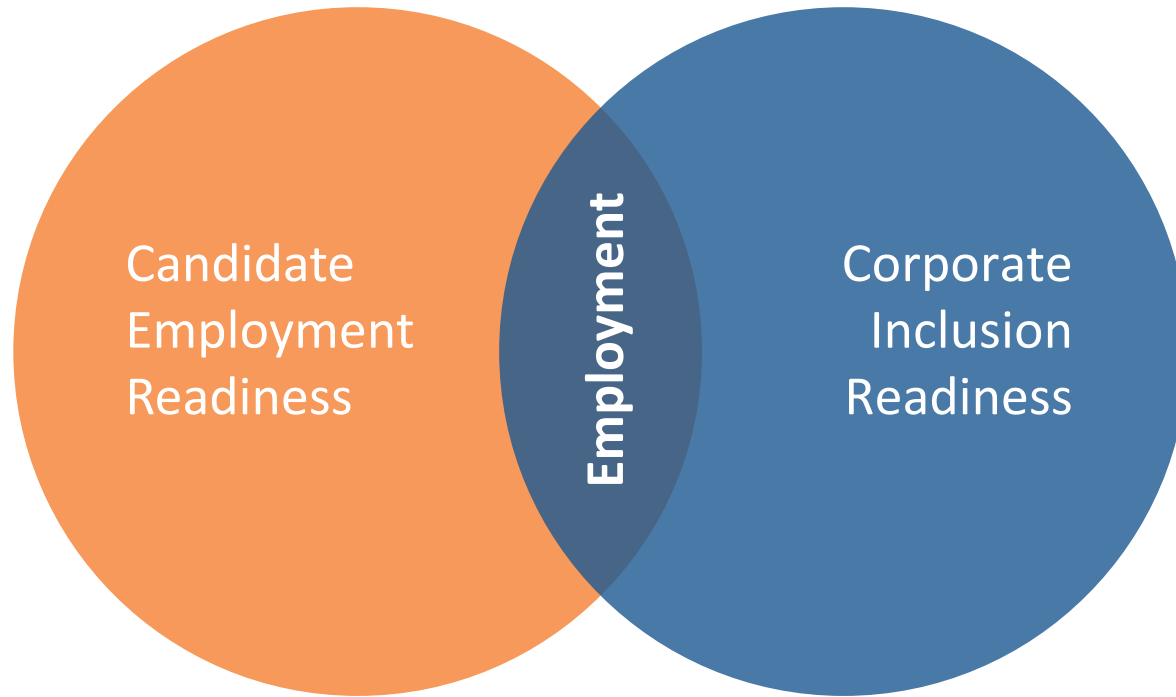
9-months in-person
15-hours/week program
Hands-on Learning



NFAR Cyber Milestones and Challenges

- The Cyber Pilot started in August 2022
 - We have 7 participants in the program now with 1 joining in January.
 - 5 Passed A+ Certification (Core 1 and 2) + 2 study in progress
 - 4 Passed N+ Certification + 2 study in progress (expect 6 to pass)
 - 1 Passed S+ Certification + 5 study in progress (expect 4-5 to pass)
 - 1 CySA+ study in progress
 - Program extended by 6 weeks to account for Certification review cycle
- Partnering with Haiku, the video game that trains, to help expand access to hands-on cybersecurity training.
- NFAR worked with County of San Diego to unanimously approve legislation to increase recruitment in the neurodiversity community and hiring.

Driving Neurodiversity Employment



The Neurodiversity Model



Neurodiversity describes the idea that people experience and interact with the world around them in many different ways;

There is no one "right" way of thinking, learning, and behaving, and

Differences are not viewed as deficits.

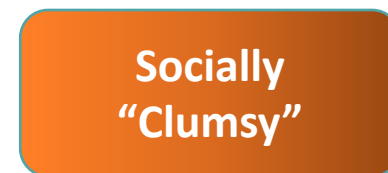
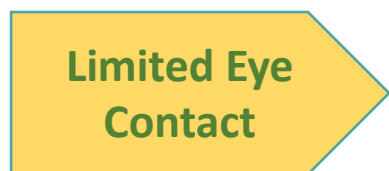
Neurodiversity refers to the diversity of all people, but it is often used in the context of autism spectrum disorder (ASD), as well Dyslexia, ADHD or other learning disabilities.

What is Autism?

Unique combination of affected areas



"Perceived as Deficits"



Sensory overstimulation

Quirks

Poor conversationalist

Autism Strengths

KEY CHARACTERISTICS

Scholars identified characteristics that, in general, individuals with autism demonstrate that make them desirable employees.*

Trustworthiness

Reliability

Systemizing

Innovation

Attention to detail

Low absenteeism

Accept repetitive tasks

Analytical thinking

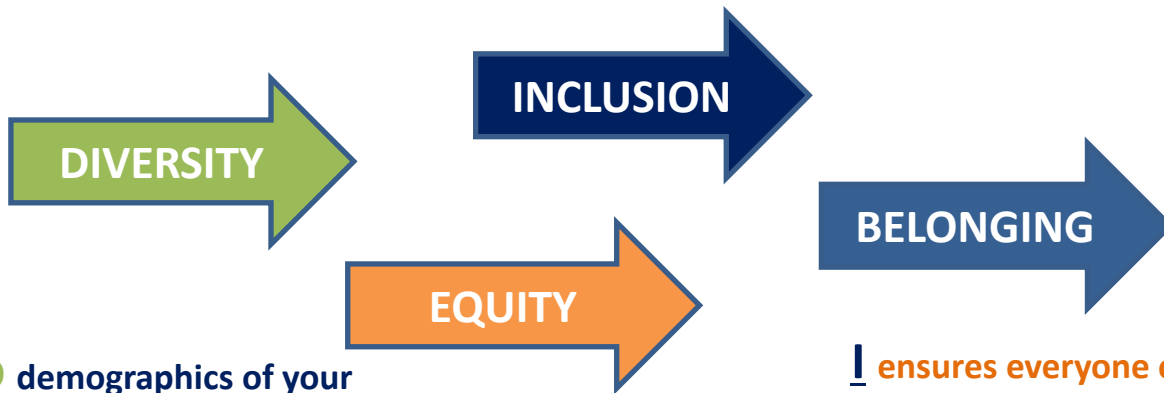
Focus on work and results (productivity)

Visualization

*Data compiled and presented by University of Washington and the Neurodiversity at Work Employer Roundtable

Embracing Workplace Diversity

Diversity in the workplace IS evolving, comprised of many groups, all differences – company policies & initiatives created to promote sustainable growth and innovation



D demographics of your workplace -includes ethnicity, gender, sexual orientation, age, disability status, skills, and many other factors

E means that each team member has the proper resources to do their job, with equal opportunity.

I ensures everyone on the team is treated fairly and respectfully, despite differences

B centers around the employee experience of *feeling* accepted in the workplace



NEURODIVERSE TALENT MAKES BUSINESS SENSE



“People with autism bring strengths that we need.”

Mary Ellen Smith, VP, Microsoft

“We hire people in spite of autism and because of autism.”

– Jose Velasco, SAP

+ 40 more Major Corporations are finding neurodiverse talent is an asset to their company!

Neurodiversity at Work Employer Roundtable

The Future of NFAR Cyber

- Program Design Review –
 - Focus on Cyber and key certifications (S+/CySA+)
 - Focus on A+/N+ core knowledge for needed for S+
 - Build more Day-in-the-Life work samples from industry
- Recruitment and intake for Cyber Cohort 2 for July/August start
- Build Employer Partnerships
 - Neurodiversity Training
 - Internships
 - Guest speakers/tours

Q&A

Thank you for attending!

- Learn more about CyberHire:

<https://workforce.org/aboutcyberhire>

- Learn more about NFAR Cyber:

<https://www.nfar.org/what-we-do/nfar-cyber>



NFAR

