# Please Note...

This webinar and the engagement tools will be recorded.

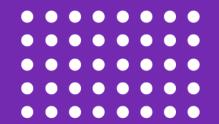
An archive will be available on the event website.

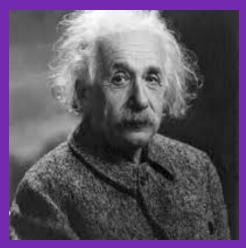




# Unlocking the Potential: Cybersecurity Careers for the Neurodiverse

March 20, 2024













Albert Einstein

Jerry Seinfeld

Steve Jobs

Billie Eilish

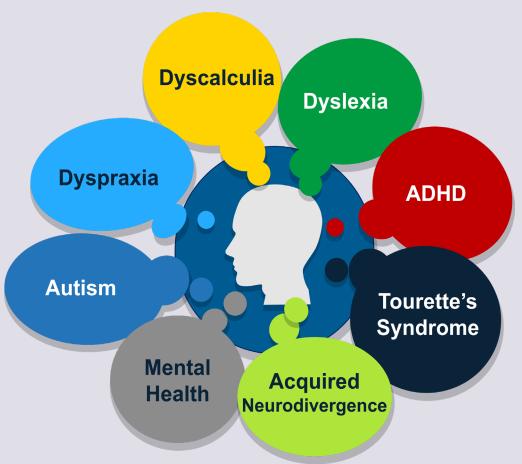
Emily Dickinson



## **Frequently Used Terms**



The range of differences in individual brain function and behavioral traits, regarded as part of normal variation in the human population







### Neurodivergent/ Neurodistinct

One whose neurological development and state are atypical, usually viewed as abnormal or extreme. The term was coined in the neurodiversity movement as an opposite for "neurotypical"



# **Neurodiversity Celebration Week**

- March 18-24, 2024
- www.neurodiversityweek.com









Jennifer Sheehy
U.S. Department of Labor



Teresa Thomas *MITRE* 



# **Neurodiversity and Cybersecurity: Supporting Talented Workers**

NIST's NICE Webinar Series Wednesday, March 20, 2024

Jennifer Sheehy Deputy Assistant Secretary, Office of Disability Employment Policy U.S. Department of Labor





### **Key Learning Objectives Include...**

- Frame neurodiversity and emphasize its importance for fostering inclusive talent pipelines
- Describe ODEP's agency mission and some of its projects
- Share resources from ODEP and other agencies









## This Lens Helps Frame Neurodiversity

### **Neurodiversity at work**

- Diversity of all thinking, learning, and perception
- Parallels to biological diversity
- Variations in all humans (neurotypical + neurodivergent)

### **Neurodivergence of workers**

- Atypical thinking, learning, and perception (divergent)
- Major outliers on assessments of cognition, social interaction, and communication
- Strong performers when access needs and support needs met to enable talents and superpowers







### **Neurodivergence Includes These Disabilities**

- Autism, intellectual disability, and other developmental disabilities
- Brain injuries, dyslexia, and learning disabilities
- Mental health conditions (e.g., generalized anxiety, bipolar disorder, etc.)
- Other cognitive disabilities with a substantial impact on thinking, learning, perception, and information processing









# **Neurodiversity Supports Talent Streams**

- Millions of talented, skilled, neurodivergent workers who can help enhance inclusive talent pipelines to foster core missions
- RAND's report on <u>Neurodiversity and National Security</u>: How to <u>Tackle National</u> <u>Security Challenges with a Wider Range of Cognitive Talents</u>
- Federal agency efforts, such as at Wright-Patterson Air Force Base, the National Geospatial-Intelligence Agency (NGA), and the Cybersecurity and Infrastructure Security Agency (CISA)
- Industry activities, including Disability:IN's <u>Neurodiversity @ Work</u>
   <u>Employer Roundtable</u>, which has released an <u>autism</u>
   <u>playbook</u> and a <u>neurodiversity at work playbook series</u>





## **ODEP Has This Agency Mission**

- **Agency Mission**: To develop and influence policies and practices that increase the number and quality of employment opportunities for people with disabilities
- ODEP's Website that shares resources on numerous employment focuses









## Some of ODEP's Projects Include...

 Employer Assistance and Resource Network on Disability Inclusion (EARN)



Job Accommodation Network (JAN)



Partnership on Employment & Accessible Technology



 Research Support Services for Employment of Young Adults on the Autism Spectrum (REYAAS)





# **EARN's Neurodiversity Resources**

- Guides and toolkits, including the:
  - Neurodiversity in the Workplace Guide
  - Workplace Mental Health Toolkit
- Webinar recordings, such as on

OFFICE OF DISABILITY EMPLOYMENT POLICY

UNITED STATES DEPARTMENT OF LABOR

- Neurodiversity: Dispelling of Myths, General Awareness, and How to Build a More Inclusive Work Environment
- Hiring and Supporting Neurodivergent Workers: Strategies for Success





# EARN's Neurodiversity Resources (Cont.)

- Other Webinar recordings, including:
  - Strategies to Promote Culturally Competent Mental Health Awareness in Workplaces
  - Navigating Mental Health in Skilled Trade and Industrial Occupations
  - Mental Health and Wellness in the Workplace
  - Training course on Creating a Mental Health-Friendly Workplace
- Section 501 Information Center

OFFICE OF DISABILITY EMPLOYMENT POLICY

UNITED STATES DEPARTMENT OF LABOR



# JAN's Neurodiversity Resources

- Free, expert, confidence assistance and brainstorming from the Cognitive and Neurological Disability Team (<u>Team Q&A</u> on May 11)
- Tailored website resources from the <u>A to Z Library</u> for:
  - Neurodiversity at work, and self-disclosure
  - Specific disabilities, including <u>autism</u>, <u>mental health conditions</u>, and other conditions
- Webinars, such as on:
  - Accommodations for Neurodivergent Workers (archived)
  - Accommodating Employees with Diverse Cognitive and Neurological Needs (April 11)







# PEAT's Neurodiversity Resources

- Podcast episodes on:
  - Neurodiversity & ADHD in the Workplace: Creating Opportunities and Building Communities
  - Neurodiversity & Intersectionality: A Disclosure Challenge
  - Building Neurodiverse Talent Pools
- AI & Disability Inclusion Toolkit and Inclusive XR & Hybrid Work Toolkit







# **REYAAS Project's Resources**

- Barriers and Facilitators to Employment and Careers for Young Adults on the Autism Spectrum
- Programs, Models, and Strategies to Support Employment of Young Adults on the Autism Spectrum
- Evidence on the Effectiveness of Programs, Models, and Strategies to Support Employment Outcomes of Young Adults on the Autism Spectrum
- Characteristics, Service Use and Employment Outcomes of Young Adults on the Autism Spectrum Who Engaged with Vocational Rehabilitation Services from 2017 to 2020





### **Contact The Presenter**

Jennifer Sheehy
<a href="mailto:Sheehy.Jennifer.C@dol.gov">Sheehy.Jennifer.C@dol.gov</a>

Deputy Assistant Secretary,
Office of Disability Employment Policy
U.S. Department of Labor



# Q&A



# Neurodiversity in the Workplace

**Teresa Thomas** 

NICE - March 2024



MITRE | SOLVING PROBLEMS FOR A SAFER WORLD®

# Neurodiversity and Cyber



# Why is neurodiversity important for cyber?

### Autistic traits are associated with

- Increased presence in computing, IT, engineering, and physics<sup>1</sup>
- More advanced digital skills<sup>2</sup>
- 40% faster problem solving<sup>3</sup>
- Better hacking and systematizing skills<sup>4</sup>
- Unbiased ability to detect emotional fake news<sup>5</sup>

Autistic traits could also be associated with the negative side of these traits. <sup>1, 6, 7</sup>



# What do you pack for the beach?







# How does neurodiversity impact hiring?

### Job advertisements

Multiple-meaning words, unclear words, and verbiage/jargon<sup>8</sup>

### Interviewees encounter difficulty with:

- processing questions quickly<sup>9</sup>
- understanding the interviewers' facial expressions and connecting with them<sup>10</sup>
- reciprocation in response to smiles and handshakes<sup>11</sup>
- non-literal and abstract language and sensory environment<sup>12</sup>

Neurodivergent job candidates are rated lower, described more negatively, and are less likely to be hired in general, but particularly when interviewers lack knowledge of neurodiversity, and the applicant does not disclose it. 13

# What could a neurodiversity "program" look like?



A Few Programmatic Options

| Training Only               | Internship                          | Apprenticeship   | Contracting                                | <b>Provisional Hire</b>    | <b>Program Pilot</b>  | Full Program                               |
|-----------------------------|-------------------------------------|--|--|----------------------------|---|--|
| Org-wide ND 101<br>Training | Recruit from partner schools        | Recruit from partner programs from a broader pool of potential | Partner with contractors who have programs | Recruit from programs      | Recruit small<br>number one time<br>from partner<br>program | Continuously recruit from partner programs |
| Leadership<br>Training      | Org-wide and team training          | Org-wide and team training                                     | Org-wide and team training                 | Org-wide and team training | Org-wide and team training                                  | Org-wide and team training                 |
| Security/Health<br>Services | Mentoring in-house and from schools | Mentoring in-house and external                                | Mentoring external                         | Mentoring in-house         | Mentoring in-house  | Mentoring in-house                         |
| Recruiters                  | Support for managers and students   | Support for managers and students                              |  |                            | Support for managers and participants                       | Support for managers and participants      |
|                             | Supported<br>Mitigations            | Supported<br>Mitigations                                       |  |                            | Supported<br>Mitigations                                    | Supported<br>Mitigations                   |
|                             | Data for<br>Systemic<br>Change      | Systemic Change  | Exposure to encourage culture change       | Systemic Change            | Data for Systemic<br>Change                                 | Requires Systemic<br>Change                |
|                             | Short-term/low-risk                 | On-the-job training  | Low- to no-risk                            | Full-time/lower-<br>risk   | Short-term/low-risk   | High impact/long term                      |
|                             | Good press                          | Good press   |  |                            | Good press  | Good press                                 |



# The Portal Project – an Internship Example

Most processes are the same as normal intern/co-op processes, with these added supports:

- Targeted recruiting from universities with strong programs
- Targeted recruiting of willing departments
- Train participating managers and co-workers/mentors
- Onboard students one-on-one to explain the program and supports
- Continuing support and reach-back for managers beginning as bi-weekly
- Monthly or bi-monthly professional development Student Mixers
- Schools are asked to check in with their students weekly



# Neurodiverse Federal Workforce Pilot Example

**Strategize** 

**Prepare** 

**Execute** 

**Sustain** 

Define the need and your mission

#### Find champions

- Senior leadership
- Inclusion & Diversity team
- Willing managers

### Collaborate with specialists

- Universities
- · Service providers
- Contractors

Develop your strategy

#### Train

- Managers
- Co-workers
- Agency-wide awareness

#### Train support services

- Security
- Health services
- Employee Assistance Programs

#### Recruit talent

Assess candidates

#### Onboard

- Interns
- Full-time employees

Monitor & mentor

Mediate & mitigate

Evaluate and update systems to continuously:

Mediate and mitigate

Evaluate performance

Promote



# Q&A

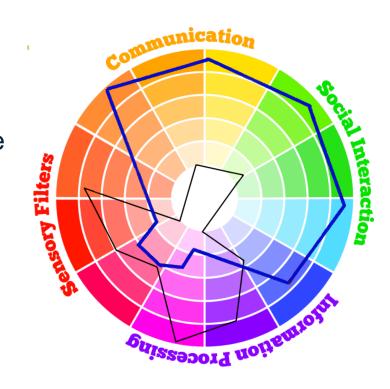


# Accommodations That Work for Your WHOLE Team



# Enable Everyone on Your Team

- Understand your team's assumptions, unspoken rules and norms and be able to articulate them.
- Give explicit guidelines for expected behavior
- Focus on strengths. Appreciate your colleague's ability to notice the "obvious things" that you do not see.
- Give iterative deadlines for large tasks.
- Arrange for short-term rewards and regular positive feedback.
- Be open to new and creative ways to engage in a task.



"The things that are obvious to me are different from the things that are obvious to you."

Mykola Bilokonsky



## Accommodations that Work for Everyone

### Logistical

- Adjust the environment
  - Lights, sounds, etc.
- Allow flexible working hours
- Accommodate time needed to complete tasks
- Send meeting agendas and minutes

### Social

- Accommodate preferences for different modes of communication
- Ask: video on or off?
- Give frequent feedback
- Avoid idioms
- Give very specific deadlines

### Tech-based

- Screen readers
- Live transcription
- Grammar and spell check tools



# **Communication Tips & Tricks**

- 1. GIVE CONTEXT Give the overall context and send out meeting agendas ahead of time
- 2. BE CLEAR Explain specifically what outputs are required, by WHEN
- **3. GIVE PRIORITY** Articulate which tasks have priority and where to focus: on-time or perfect
- **4. CHECK UNDERSTANDING** Have the group repeat back what is expected by when and ask clarifying questions
- **5. LEVERAGE STRENGTHS** If possible, have individuals choose the parts of the task in which they have "specialized skills"
- **6. SEND TYPED NOTES** When possible have someone type up BRIEF notes email to the team
- 7. ALLOW QUESTIONS Allow for and welcome questions after the briefing

Helps you get a project done, on time and effectively with full team buy in.



# Panel Discussion



## Resources to Explore



## Recruiting from schools

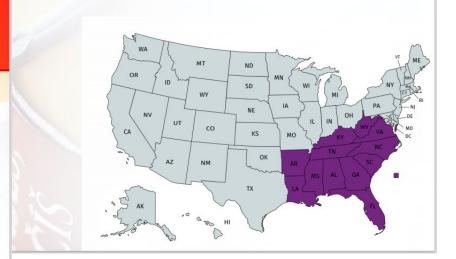


#### **Southeast**

- Number of colleges/universities in region: 1166
- Number of states: 12
- Number of programs: 20

#### **Region:** Southeast

| College/University                | Program with Link                                  | City        | State | Туре                           | College Setting |
|-----------------------------------|--|-------------|-------|--------------------------------|-----------------|
| Austin Peay State<br>University   | Full Spectrum<br>Learning (FSL)                    | Clarksville | TN    | Public                         | 4-year          |
| Central Baptist College           | Autism Spectrum Assistance Program (ASAP)          | Conway      | AR    | Private,<br>Not-for-<br>Profit | 4-year          |
| *Christian Brothers<br>University | Students Tackling Autism-Related Syndromes (STARS) | Memphis     | TN    | Private,<br>Not-for-<br>Profit | 4-year          |
| Clemson University                | Spectrum Program                                   | Clemson     | SC    | Public                         | 4-year          |



https://collegeautismnetwork.org/





## Recruiting from services

## THE SOCIOO BOOK CAREERS











**Workforce Recruitment Program** 



## Writing a Neuro-inclusive Job Description

#### Do



Ensure job posting is clear and free of jargon



Clearly differentiate 'must have' skills and experience from 'nice to haves'



Include a statement affirming your organization's commitment to diversity and inclusion, including who to contact for reasonable accommodations.

#### Don't



Just reuse old job
descriptions that may include
requirements that are not
necessary for the role you're
hiring for



Use complex fonts or colors



Publish without having someone else read and check for clarity



## Communicating with Candidates

Ensure your recruitment materials and website clearly explain your overall hiring process.

Make sure you set clear expectations. You should explain:

- The specific purpose the interview/assessment will serve
- Assessment criteria
- Who will be there
- What kind of questions might be asked (share before hand)
- How long the assessment will take
- What kind of tasks will be involved
- Logistical guidance: dress code, what to bring, where to go, etc.



© 2023 THE MITTE CORPORATION

## **Examples for Giving Clear Directions**

#### **Use Words Literally or Explain Them**

Words can have a more expansive meaning to a person or group. Explain it all unless using the dictionary definition.

#### No Idioms, Figures of Speech, or Slang

In popular culture, varying regions, different languages there are sayings that directly make no sense. Don't use them.

#### **No Unitless Measures**

Extensive, broad, light, and improve try to indicate how much. They are rulers without lines, terms without values.



## Giving Clear Directions (pt 2)

#### **No Vague Comparisons**

Saying 10X it or give 110% tells me little. How do I 10X an email or get the extra 10% above my full 100% capacity.

#### **Give a Due Date**

Saying "when you get to it" or "fit it in" doesn't provide a target to allow us to plan our time and workload.

#### **Clearly Prioritize**

Tell me what is important. Saying "this is a rush" doesn't help me know how it ranks to my existing priorities.

#### **Explain the Desired End State**

You have a picture in your mind of what you want. If I understand the picture, it is easier to do what you want.



## Giving Clear Directions (pt 3)

#### **Put it in Writing**

We get requests every day. It is hard to remember the specifics. Writing or drawing keeps details from being lost.

#### **Clearly Specify the Time/Effort**

We can do amazing work & get lost making it great. Knowing the time allotted keeps us from overdoing it.

#### **Verify Understanding of the Ask**

You're a gifted communicator, but I may miss something, misunderstand, or just be checked out. Ask for my take.

Tim Goldstein, Neurodiverse Communication Specialist Materials, Training, Consulting: www.TimGoldstein.com



## Helpful Articles and Websites

#### **Articles**

- A Dozen Ways You Might Be Misunderstanding the Autistic Person in Your Life
  - https://neuroclastic.com/a-dozen-ways-you-might-be-misunderstanding-the-autistic-person-in-yourlife/
- How to Talk About Autism Respectfully (includes information about the Double Empathy Problem)
  - https://coda.io/@mykola-bilokonsky/public-neurodiversity-support-center/how-to-talk-about-autism-respectfully-84
- How the ADHD Brain Works
  - https://www.additudemag.com/how-the-adhd-brain-works-expert-answers/
- Neurodiversity in National Security study by Rand
  - https://www.rand.org/pubs/research\_reports/RRA1875-1.html
- Enabling Neurodiverse Talent in the Intelligence Community paper by MITRE
  - https://www.mitre.org/sites/default/files/2024-01/PR-23-4014-Enabling-Neurodiverse-Talent-in-the-Intelligence-Community.pdf



## Helpful Articles and Websites

#### **Websites**

- Job Accommodation Network resources for employees from Department of Labor
  - https://askjan.org/
- Employer Assistance and Resource Network on disability inclusion resources for employers
  - https://askearn.org/
- Neurodiversity at Work Playbook
  - https://disabilityin.org/resource/neurodiversity-at-work-playbook-employee-engagement-growth-series/
- The Neurodiversity Hub a WEALTH of information and tools, mostly out of Australia
  - https://www.neurodiversityhub.org/
- How to ADHD a YouTube series that focuses on education and tips/tricks
  - https://www.youtube.com/@HowtoADHD/videos
- ADDitude online magazine focusing on ADD and ADHD with education, resources, and opinion pieces
  - https://www.additudemag.com/
  - (ex: we searched this site for "homework" and found a list of very promising articles.)







## Submit an event survey!

https://www.surveymonkey.com/r/Mar2024NICEWebinar



### **NICE Webinar Series**

Reintegrating Justice-Involved Individuals into Cybersecurity Careers
April 17, 2024, 2:00-3:00PM EDT







# NST\NICE