
Neurodiversity: Understanding Autism & Employment

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\FID-ji-tek\ verb-noun: *technology focused*



FIDGETECH



Objectives

- Understanding Autism Spectrum Disorder (ASD)
- The benefits of employing people w/ ASD
- Preparing for employment
- Employers neurodiversity efforts
- Considerations for success

Understanding Autism

Defining Terms

- Atypical
- Aspergers
- Autism Spectrum Disorder (ASD)
- Spectrum
- Neurodiversity
- Neurotypical

1 in 54 children have autism
90% of autistic adults are un/under-employed
70% will be unable to live independently



Depression rates tripple when out of work for a year
(19% vs. 6.4%)



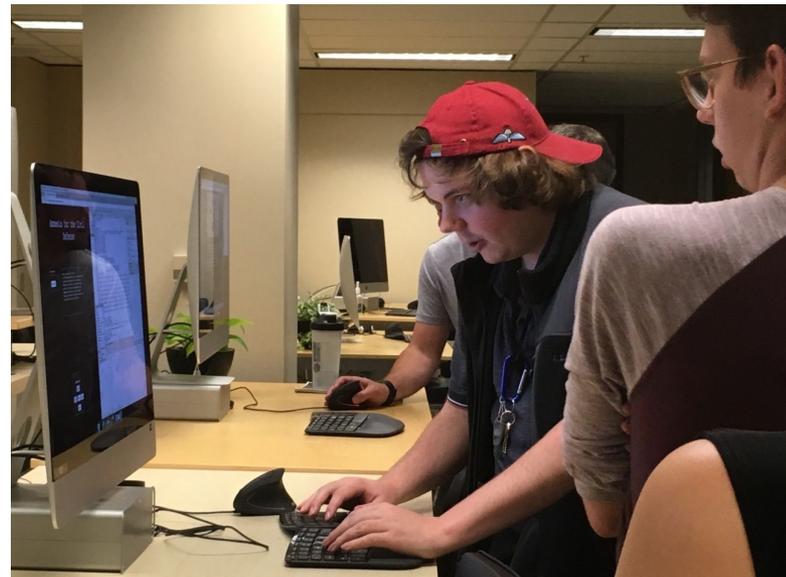
Almost half diagnosed with ASD are of average or above-average intellectual ability



Hi-tech Talent Shortage

Many companies are now understanding the benefits of a neurodiverse workforce

<https://www.cbsnews.com/news/the-growing-acceptance-of-autism-in-the-workplace/>



Prominent
Companies
who have reformed HR
processes or have
start-up efforts to access
neurodiverse talent



Benefits of Employing People w/ ASD

- Reliable, honest, work over office politics
- Tolerant of repetition and routine
- Attention to detail, accuracy and a memory for details
- Some have strong logic and analytical skills
- Many ASD people excel in math, technology, music, art
- Drawn to computing, scientific research, software testing, cybersecurity, media design and development

Benefits of Employing People w/ ASD

- Increased productiveness - HPE's neurodiverse software-testing teams are 30% more productive than the others
- Quality improvement - products, services, and bottom lines have profited from lower defect rates and higher productivity
- Boosts in innovation - SAP and HPE report examples of neurodiverse employees' participating on teams that generated significant innovations



Hewlett Packard
Enterprise



Benefits of Employing People w/ ASD

- Improved processes – SAP and Microsoft have stated goals to make their mainstream talent processes so “neurodiversity friendly” that they can ultimately close their neurodiversity programs
- Improved communication - efforts to make corporate communications more direct have improved communication overall



Benefits of Employing People w/ ASD

- Employee engagement - neurotypical people report that involvement makes their work more meaningful
- Loyal employees – appreciative having been given a chance, very loyal and have low rates of turnover
- Reputational – pioneers have been recognized as exemplars of responsible management and have won global corporate citizenship awards



UNITED NATIONS



Prepare for Employment

Training Tips

- Stretch – the schedule and pace of many programming jobs are set by the employer. Aim to expand your time in training and measure your rate of progress
- Repeat - there are many ways to solve a complex problem. When the opportunity arises, solve a problem in more than one way
- Collaboration - is a mixing pot of ideas. See how others solved the problem you solved, ask about aspects that don't make sense to you. Ask someone how to solve one of your problems and then solve the solution their way



Prepare for Employment

Building Credible Work

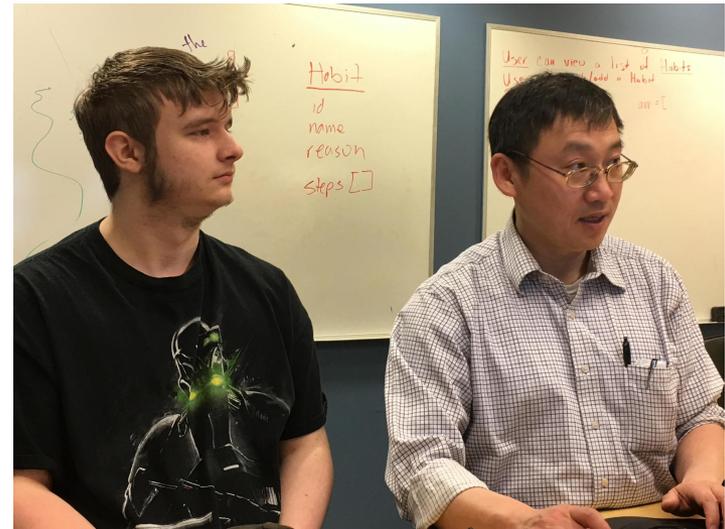
- Portfolio Building - make your own site, or use a site tool (Squarespace). Your portfolio projects don't have to be big and team projects are always better
- Active Github - solve lots of small problems and track them. Have frequent check-ins, at least once a day. Keep a couple projects active at a time and use different platforms, languages, and frameworks
- Be Entrepreneurial – your skills are needed, be active on sites like Upwork. Take advantage of open source opportunities such as Github



Prepare for Employment

Interviewing Tips

- Choose companies with a collaborative interview process
- Focus on your ability and strengths
- Understand everyone has key talents and abilities they can offer
- Create a cover letter
- Start with internship or work experience program, if appropriate



Employers Neurodiversity Efforts

- Executive sponsors support a neurodiversity program
- A core team in the company is passionate in neurodiversity champions the cause
- Support circles (team buddy, mentor, job coach) provide assistance with daily work tasks, workload management, and prioritization
- Employ training to help managers and other workers to be intentional
- Paired or mob programming are often used to facilitate collaboration



Employers Neurodiversity Efforts

Social partners or external agencies can assist companies by;

- Suggesting candidates
- Assist with prescreening
- Arranging public funding for training
- Administer training
- Helping with job and life skills coaching
- Providing mentorship and ongoing support



Considerations for Success

Organization

- Understand how long an assignment should take
- Don't over obsess on unimportant details (perfectionist tendencies)
- Get help prioritizing tasks and organizing information
- Create a task list to avoid getting overwhelmed
- Aim to be flexible with regard to work routines

Considerations for Success

Reading social cues & other's points of view

- Look out for nuances or sarcasm
- Make sure to listen to others perspectives and interests
- Make "small talk" to meet people and show you are friendly
- Monitor being overly honest, in some cases it is better not to say anything
- Aim to make eye contact and/or smile

Considerations for Success

Sensory / motor abilities

- Communicate any sensory difficulties (to lighting, temp, noises, smells, texture)
- May need to wear noise-canceling headphones
- May need to ask for more space if appropriate
- May need breaks to avoid sensory overload
- Seek written (vs verbal) instructions if required

Autism at Work Overview



Pre-screen

One day workshop	Phone, Skype video Technical skills assessment	In-person meetings	Phone, In-person Meet & Greets Introduction to vendor partner & JPMC autism at work process	Phone Technical skills assessment	Phone, Skype video, in-person Introduction to SAP and autism at work process
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Assess

Four week training and assessment robotics and autism assessment exercises	One week virtual technical exercise and information exchange	30-90 day paid on-the-job training program with Job Consultant	Three week in-person soft skills training	One week in-person event Collaboration activities, interview preparations, team interviews	One week in-person soft skills training
Six week Work Experience Program	One week in-person training: interpersonal skills, team-based work simulations, introduction to the role, the business and the firm	Standard recruiting process			Five week SAP Autism at Work Enterprise Readiness Program
Four week internship					

Job offer ★



Manager/
team training

Supported three year training program Candidate: technical skills, professional and life skills	In-person group job training In-person customized onboarding	In-person team session	Video-based autism sensitivity training for recruiters, managers, and immediate colleagues	In-person team session Online training	Autism sensitivity training for manager and immediate colleagues
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On-board

Supported onboarding process Three year support team: Autism Spectrum Consultant, technical specialists	Cohort community Peer mentor/buddy, career development counselor, job coach Employee Resource Groups	Supported onboarding process Peer mentoring Employees Resource Groups	Supported onboarding process Support-circle: job-coach, mentor, and team buddy	Support circle: peer mentor, community mentor, and job coach Employee Resource Groups	Supported onboarding process Support-circle: job-coach, mentor, and team buddy
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Primary
roles

Software testing Cyber security Data analytics Infrastructure monitoring and automation	Data analytics Quantitative analysis Robotics Cybersecurity	11 roles across 11 departments Across functions: Information Technology, Product Development, and Credit	10 roles in 4 countries	Software Engineer Data Scientist	21 roles in 9 countries Across functions ranging from Human Resources to Engineering
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Broaden Definition of Talent

Many companies are now understanding the benefits of a neurodiverse workforce and are adjusting their recruitment, selection, and career development policies to reflect a broader definition of talent.

Austin, R. D., & Pisano, G. P. (2017). Neurodiversity as a Competitive Advantage. *Harvard Business Review*, 95(3), 96-103.

