



2026398: FW-HTF-RL: Personalized Virtual Job Assistants to Prepare Individuals with Neurodevelopmental Disabilities for Entry Level IT Jobs
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Objective

- Create AI-enabled software platform (**Future Technology**)
- to help individuals with mild to moderate neurodevelopmental disabilities (**Future Workers**)
- build careers in IT industry (**Future Work**)

Team

- ✓ Temple and George Mason Universities
- ✓ Expertise in CS, behavioral science, and special education
- ✓ Collaboration with vocational programs and employers

Guiding Insight

- Similarity between Applied Behavior Analysis (ABA) and best practices in job micro-tasking (e.g., MTurk)

Questions

- (a) What job tasks are appropriate
- (b) What task analysis principles enable job decomposition and chaining
- (c) What UI design principles minimize cognitive burden
- (d) How to observe worker behavior unobtrusively and ethically
- (e) When and how to provide support and intervention
- (f) How to improve communication between workers, employers, and job coaches

Years 1 and 2

- ✓ IRB-approved pilot study with 8 neurodivergent workers:
 - Mockup of 5 Mturk HITs
 - Insight into worker attitudes, need for training and on-job support
- ✓ IRB-approved study with 10 neurodivergent and 10 control workers
 - Created a web platform similar to Mturk with monitoring
 - Mockup of 5 Mturk HITs
 - Insight into within and between group differences in performance and perspectives

Ongoing Efforts

- Employer survey
- Soft skill requirements in job ads
- Systematic literature review
- Neuroaccessibility user design study

