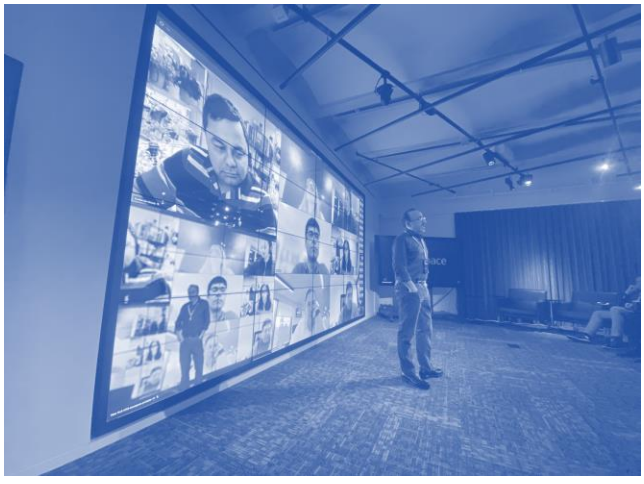
AUTISM 2024 HACK-A-THON

APRIL 3RD & 4TH

300 Lafayette St, New York, NY 10012 (Microsoft Garage) / Virtual

Bring FSI developers together to demonstrate how innovative Microsoft technologies can transform autism treatment by tackling real world use cases provided by families and creating lasting open-source projects for the community.

2	100+	6
DAYS	DEVELOPERS	USE CASES



2024 USE CASES

USE CASE 1: THERAPY SESSION COPILOT

An RBT (Registered Behavioral Technician) implements a session designed by the BCBA and looks to accomplish the goals and targets set by the BCBA. Usually, they carry an IPAD or an IoT device to capture their observations. But this has two challenges - it splits the focus of the RBT between focusing on the child and capturing the observations; and it is a very one-dimensional approach to capture the observations. This use case attempts to solve these challenges by providing multi-sensory approach to data capture.

USE CASE 2: CLIENT COPILOT

A BCBA (Board Certified Behavior Analyst) designs a program specifically for each child based on individualized treatment plan. It will center around the activities the child enjoys and responds to. The objective is to have specific tasks for the child to complete with a certain level of fluency. This needs to take into account previous assessments, observations, and progress markers.

USE CASE 3: CLIENT ONBOARDING COPILOT

Typically, a BCBA gets limited amount of time to onboard a new patient and this can be a very cumbersome task. It includes several types of information to intake such as patient demographics, medical history, consent forms, past services, etc. Copilot will be able to ingest historical documents and allow parents, BCBAs, and RBTs to actively collaborate across sessions.

USE CASE 4: FRIENDLY NEIGHBORHOODS MOBILE NETWORKING APP

When parents move into a new neighborhood, they are not sure what local resources are available to help them or their child. They don't know which RBT, BCBA, or ABA therapist will be best suited for their child. Often times, parents don't even know what questions to ask or what benefits are available to them. This use case attempts to start solving the problem.

USE CASE 5: HOLOLENS

This use case will focus on the use of HoloLens for teaching job skills to people with Autism, particularly those aging out of the supports provided in the school environment. Unemployment for those with Autism is significant and the supports in the work environment are limited. The use case will use HoloLens AR to help with basic job skills by presenting visual cues on how to complete task such as stocking shelves or preparing food. It will also make use of Gen AI, to manage, evaluate, and provide feedback to the student on how well the skill is being performed.

USE CASE 6: METAVERSE

For those on the autism spectrum, social situations are exacerbated by difficulty reading standard social cues. Having a safe and controlled environment to practice responding to common social situations, personality types, and social cues would allow users to face new situations with confidence. Since creating such an environment would be difficult to scale, this use case applies augmented reality to provide a unique social practice environment in an application. Furthermore, since those with autism are often drawn to repetition, the app utilizes generative AI to ensure adequate variety across sessions. Generative AI will also be used to evaluate the user's performance.

WHAT'S NEXT?

Please complete the registration form and join us!

https://aka.ms/hack-4-autism-registration

2024 FSI Autism Hackathon - Early Registration