



# AUTISM HACK-A-THON

2026

May 20<sup>th</sup> & 21<sup>st</sup> (In-Person or Virtual)

New York City and Virtual

Bring FS developers together to demonstrate how AI can transform services for autistic people who require lifetime, round-the-clock care by tackling real world use cases provided by families and creating lasting open-source projects for the community.



# 2026 USE CASE TOPICS

## USE CASE 1: AI-POWERED “COMMAND CENTER”: MULTI-SENSORY LEARNING ANALYSIS

**The Focus:** Build a Digital Command Center that uses **Computer Vision and Natural Language Processing (NLP)** to capture multi-sensory data during learning sessions. This helps professionals understand engagement levels and session dynamics in real-time, allowing them to focus on the individual rather than the clipboard.

**Hackable Outcome:** A dashboard that synthesizes video/audio into actionable “session health” metrics.

## USE CASE 2: AGENTIC IEP ARCHITECT: LIFETIME DATA SYNTHESIS

**The Focus:** Utilize **Agentic AI and RAG (Retrieval-Augmented Generation)** to ingest decades of fragmented data—diagnostic reports, psychoeducational evaluations, and IEPs. The goal is to build a secure, personalized foundation that generates highly tailored program recommendations that evolve with the individual.

**Hackable Outcome:** An AI agent capable of cross-referencing past evaluations to suggest current IEP goals.

## USE CASE 3: AI-AUGMENTED WORKFORCE: UPSKILLING FOR THE AI ECONOMY

**The Focus:** This case addresses the transition from school to a shifting workforce. Develop **Mobile AI and AR tools** that don’t just teach tasks but teach individuals how **to interact with and oversee AI-driven workflows**. By focusing on “AI Co-piloting,” we enable 1:N support levels where individuals remain competitive and engaged in meaningful, tech-forward work.

**Hackable Outcome:** A tool that helps a user “prompt” or manage an automated system to complete a complex workplace task (e.g., inventory management or digital asset tagging).

## USE CASE 4: AI AMBIENT GUARDIAN: THE INVISIBLE SAFETY NET FOR HOUSING

**The Focus:** Leverage **Edge AI and Sensor Fusion** to create a “Shared Care” model for semi-independent living. Instead of constant human “hovering,” use predictive behavioral monitoring and anomaly detection to identify emergencies or elopement risks instantly.

**Hackable Outcome:** A predictive model using mock sensor data to differentiate between “routine movement” and “emergency behavior.”

## USE CASE 5: AI FINANCIAL SENTRY: SECURE GUARDIANSHIP & LONGEVITY

**The Focus:** Design **AI-driven Financial Guardrails** that protect neurodivergent adults from cyber-criminals and exploitation. This focus addresses the “longevity cliff” by using AI to manage guardianship oversight and trust disbursements for individuals who outlive their primary caregivers.

**Hackable Outcome:** An AI-monitored “Smart Wallet” or fraud-detection layer specifically tuned for vulnerable users.

## USE CASE 6: GENERATIVE SOCIAL SANDBOX: METAVERSE-BASED SKILL BUILDING

**The Focus:** Use **Generative AI and VR/XR** to create a scalable “Social Metaverse.” Individuals can interact **with AI-driven NPCs (Non-Player Characters)** that provide real-time feedback on social cues, helping users build confidence and navigate complex social scenarios in a safe, repeatable space.

**Hackable Outcome:** A VR environment or web-based simulation featuring LLM-powered characters for social roleplay.

## WHAT’S NEXT?

Please complete the 2026 Autism Hackathon registration form, and we’ll contact you with further information.

[2026 FSI Autism Hackathon - Registration](#)

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Registration

