





**P.I.** 

### **Our Team** Nilanjan Sarkar, PhD Co-P.I.'s Mary Baker-Ericzen, PhD Keivan Stassun, PhD **Project Manager**

## **AI-Based Vehicle Technology Simulator with Behavioral Strategies**

Dave Caudel, PhD Each year in the US, approximately Individuals in the United States have 36 ป in 70,000 Autism Spectrum Disorder (ASD) Researchers autistic children become adults and face a litany of Abigale Plunk, PhD Student disheartening statistics regarding: Juliette Meehan Amanda Ferrell, MS Independent Community Employment living Participation **Reilly MacDonald, MS** Fewer than 30% **Software Engineer** Lack of independence and of driving-age autistic ability to gain work individuals are licensed Devon Wilson opportunities not autistic 🖗 autistic to drive.

### Project Challenge

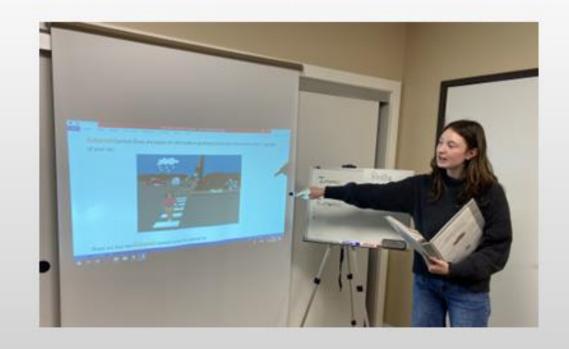
Address the transportation and employment challenges autistic adults face in the US using a cost-effective AI-based virtual driving instruction platform and a novel driving curriculum.



### **EmotiBit Physiological Sensing**



#### **Novel Driving Curriculum**



# **Project Innovation**

# **Project Outcomes**

- Engage a diverse group of civic partners in a collaborative effort to thoroughly assess the effectiveness of our driving training program for autistic individuals.
- Address field deployment challenges and the financial sustainability of the program through research pilot implementation.



#### • 25 participants have completed the program

- 92% found the program helpful and worthwhile
- 96% found the simulator prepared them for driving.
- Interest in pursuing a license rose from 42% to 92%
- 96% felt positive about driving after the program lacksquare
- 88% of caregivers were satisfied and overserved positive changes in their teen/adult's approach to driving

An example of urban and rural scenery in our driving simulator.

#### **OUR COMMUNITY PARTNERS**



## Next Steps

Efforts are underway to commercialize the driving simulator, expanding its reach to help more neurodivergent individuals safely learn to drive.



Simulator for Advanced Neurodiverse Driving Instruction

