

**Lessons Learned & Insights Gained**

*There's a lot of interesting things about how drones are built, and different stuff like the analytics, engineering or work engines. Those are really interesting. The GIST program has topics that are really interesting to me. --***Cohort 1 Participant**

*I knew some stuff in the weather, but I just don't like to raise my hand because I don't want everyone like to look at me or something. --* **Cohort 1 Participant**

**Equity**

We have employed intentional recruitment strategies to ensure equitable opportunities to the GIST program and representative participants. We partner with racially diverse, gender diverse, and autistic/neurodiverse research assistants who provide critical “insider” perspectives and adaptations to better meet the needs of autistic participants.

**Connecting Students with Autism to Geographic Information Science & Technology Careers**

Jason Painter & Jamie Pearson

NSF Award Number​: 2048937 Dates: 2021-2024

Project type:​ Innovative Technology Experiences for Students and Teachers (ITEST)

Project Overview: The goal of the project is to develop an innovative, research-based workforce development model that (1) increases student self-regulation, interest, and motivation in Geographic Information Science & Technology (GIST) and (2) expands students’ understanding of GIST/STEM concepts and skill sets.



Preliminary findings from Phase 1 of this mixed methods design indicate: (a) GIST has increased autistic student interest in STEM activities and careers and (b) GIST participants engage in various self-regulating strategies to maintain engagement and address sensory needs during STEM instruction.

**New Challenges & Next Steps**

Given the individual learning, sensory, behavior, and communication needs of our participants, we have made program adaptations such as smaller hands-on group sizes, implementing a token economy reward system to maintain student motivation, and providing strategies to support independence and executive functioning.