Abstract

- Autism affects every child differently so treatments must be customized for optimal effectiveness
- Current treatments do not fully utilize the video game market which has a strong influence on America’s youth
- Kinect’s skeletal tracking coupled with highly customizable options would improve antiquated techniques

Motivation

- 1 in 68 children are diagnosed with some degree of Autism
- Currently, no games which are fun while also improving the child’s development

Implementation

- Set of libraries for unique game creation aiming to lessen the effects of Autism
- XBox Kinect, OpenNI, NiTE

Results

- Created multiple games to encompass different player’s interests
- Customizable gameplay to accommodate the large range in children’s abilities
- Ability to alter game experience to better engage players

- Players work as a team to collect game objects
- Helps promote social interaction and motor skills

- Independently managed game settings
- Games can be tailored to each individual

- Players work together to construct various objects
- Teaches decision making and critical thinking

Conclusion

- Future system would allow users to create new games without any programming knowledge required
- Provides an endless set of possibilities to help these children develop in an effort to replace outdated treatments
- Puts control in the hands of the people working most closely with the child