## **Happy Special Birthday**

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"I pulled away when people tried to hug me, because being touched sent an overwhelming tidal wave of stimulation through my body...when noise and sensory over-stimulation became too intense, I was able to shut off my hearing and retreat into my own world", describes Dr. Temple Grandin, from her personal experiences of living with autism.

This Virtual Reality project examines a viewpoint of a child with autism. The autistic child can often experience overwhelming and over-stimulating perceptions even in a normal daily setting. People with autism experience visual distortions, nausea, and auditory, tactile, and kinesthetic impairments. The project was developed using Unity platform, the getReal3D plugin for the CAVE2 Virtual Reality environment in the Electronic Visualization Laboratory (EVL).

CAVE participants are able to see, understand, interact with and experience indirectly through the virtual autistic world and truly empathize with the child's family, friend, or neighbor. A living room scene depicts the child's birthday party while another scene visualizes how autistic the child perceives that moment.



There are 4 interactive points that allow participants to travel between both worlds; the balloons, the jumping person, the birthday cake, and the presents. An abstract hyper sensory environment is visualized in the autistic world to acknowledge the uniqueness of the child's point of view.

This project raises public awareness and understanding about people with autism and other developmental disorders. Virtual Reality is a great technological advancement that allows people to be immersed in the mind of the autistic child and to fully understand and empathize with their everyday experiences.

## References

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