3D Computer Vision: Human/Machine Interaction via Kinect

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The expectation of global computer access is the norm. This has created a societal need for computer interface designs that provide digital access to demographics of individuals with limited fine motor skills. In 2010, the Kinect was a revolutionary gaming peripheral integrated into the Microsoft XBox 360 console and games. The Kinect, PrimeSense, OpenNI SDK, and NiTE were used in tandem with 1) an application programming interface (API) for JAVA called Processing, and 2) a library written for Processing in JAVA called SimpleopenNI. This research aims to show that a $27 Kinect can be used to provide an alternative interface to the traditional tactile interface to allow complete control of all the functions of a computer running Linux, Mac, or Windows operating systems and the accompanying software.

Awards Won:
Fourth Award of $500