

The I³Stick: An Inexpensive, Immersive, Interaction Device

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Abstract

Virtual environments require interaction devices that are intuitive and ergonomic, yet capable of many input parameters. Many devices satisfying these requirements can be expensive, difficult to manipulate, and often require the integration of large software libraries with existing applications. We present a device addressing these needs while avoiding the associated downfalls. The I³Stick is inexpensive to build from commodity components, has many user input parameters including 6DOF of orientation and position, and is easily integrated into applications via a simple public domain API. Our device readily implements a variety of standard and novel interaction techniques.