

MIT groups develop smartphone system THAW that allows for direct interaction between devices

September 18 2014, by Bob Yirka



MIT researchers with the Tangible Media Group and the Fluid Interface Group have come up with a smartphone system called THAW that allows a smartphone user to seamlessly interact with other computer devices via their screen.

The system is meant to bridge the gap that exists between user devices—transferring files between phones and a desktop computer for

example (by placing the phone on the larger screen and dragging icons to the phone) or continuing to play a [video game](#) started on a console on a mobile [device](#). The same system allows for using a smartphone as a peripheral device, moving files on a [computer screen](#) for example, or manipulating images.

It's all a demonstration of a larger effort to integrate all the various devices that people are using, team members told the media recently—letting users transfer songs, videos or other files without menus or Bluetooth devices, or allowing for uninterrupted activities—imagine watching the news on your television in the morning, pressing your phone against the screen, then walking out the door as the news program continues in your hand, that's true integration—where devices become aware of not just what is being shown on a display device, but what is happening underneath to deliver that imagery.

THAW works by projecting a grid onto an underlying video screen, and then using it to orient itself. Imagery is brought into the smartphone via its camera, where software takes over, recognizing what is happening and then launching a companion application or software meant to manipulate objects on the underlying device.

In demonstrations, THAW was used to allow a smartphone holder to control action on a computer screen, similar to mouse actions. Other demonstrations were mainly related to video game applications. A [smartphone](#) could be used to add new dimensions to a game, for example, or as a means of adding functions. The ability to grab the action happening on a fixed device in real time and walk off with it was perhaps the most impressive feat of all.

Perhaps the most exciting part of the demonstration of the new technology is how it causes ideas to pop into the head—what if it

allowed for passing conversations between people, for example, or what if several people put their phones together on a table, could it assemble a feed into a single large display, to allow a small crowd to watch a football game or movie together? The possibilities seem endless, bounded only by the imagination of those who will undoubtedly be writing applications for the new technology—once it becomes available commercially, of course.

More information: tangible.media.mit.edu/project/thaw/

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