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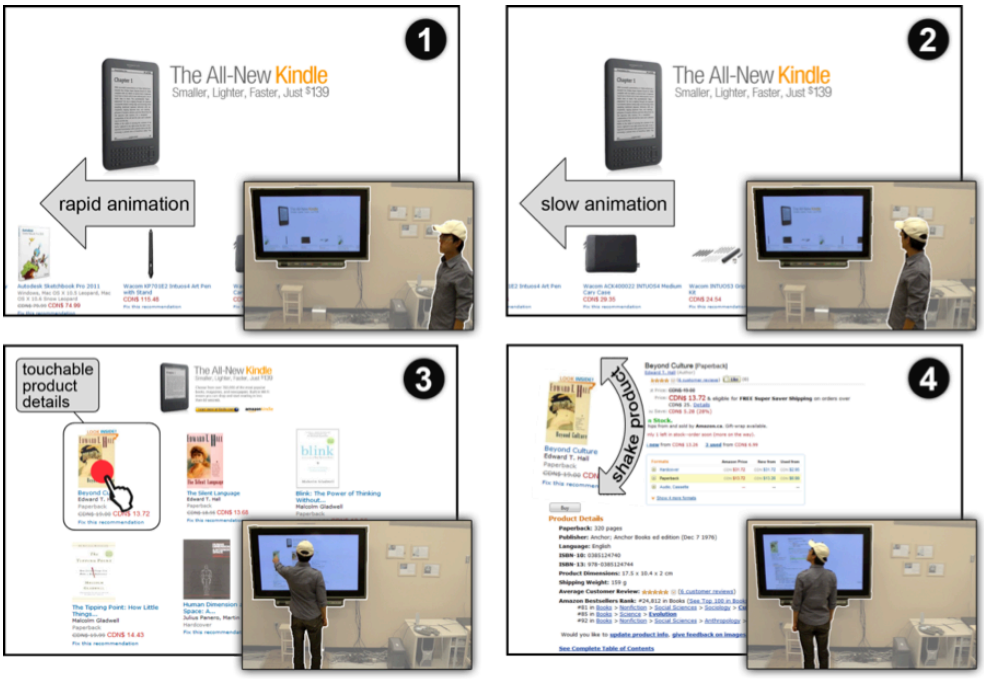
Proxemic Peddler: Interactive Advertising Grabs Pedestrians' Attention

By Miaosen Wang, Sebastian Boring, and Saul Greenberg



Effective street peddlers are able to monitor passersby and alter their sales pitch in order to capture and hold the target's attention for the entire duration of the pitch. Similarly, advertising displays in public environments could be made more effective if they were able to adjust their content in response to the attention of passersby as opposed to merely showing fixed content in a loop. Previously, other display prototypes have monitored and reacted to the presence of a person within a few proxemic (spatial) zones surrounding the screen, where these zones are used to estimate the person's attention. However, the coarseness and discrete nature of these zones mean that the display cannot respond to subtle changes in the user's level of attention towards it.

To explore this opportunity to create a more responsive display, we have developed an extension to existing proxemic models. Our Peddler Framework captures (1) fine-grained continuous proxemic measures by (2) monitoring a passerby's distance and orientation with respect to the display at all times. We use this information to infer (3) the target's interest or diversion of attention at any given time, and (4) their state of attention with respect to their short-term interaction history over time. Depending on this state of attention, the display alters its content to maintain or increase the target's interest, ultimately resulting in a purchase. With this framework, we implemented a prototype of a public advertising display – called Proxemic Peddler – that demonstrates these extensions as applied to content from the Amazon.com website.

In This Issue

Save the Date! The SurfNet Summer 2012 Workshop will be hosted by the University of Waterloo from September 27 - 29.

TableNOC: Monitoring and Controlling Telephony Networks Using Multitouch Tables/Displays

By Abhishek Sharma, Theodore D. Hellmann, and Julia Paredes

Many companies use telemarketing or telephone surveys to generate new business or assess customer satisfaction. Other companies have call centres to handle customer inquiries or requests for support. What other useful information can be extracted from these outgoing or incoming calls?

Ivrnet Inc. and the Agile Surface Engineering (ASE) group at the University of Calgary are working on a surface-based web-GIS application called TableNOC. The application is used for visualization and monitoring of network data and is being developed using open source geospatial resources like MapServer, GeoSever and OpenLayers. TableNOC visualizes information about phone calls by linking the content of the call (sales, technical support, billing, etc.) to its location of origin on a map. This allows Ivrnet's clients to see where their campaigns have – or have not – been effective. The same process can be used to organize the results of phone surveys. Additionally, it is possible to see this data in near-real time.

TableNOC runs in a variety of web browsers: all features work in Google Chrome; most features work in Firefox, Internet Explorer, and Safari; and many features work in the browsers available for iOS, Android, and Windows Phone 7 devices. Our approach to the implementation of TableNOC allows it to work on both large-format and mobile devices, as well as devices that are touch-enabled.

Even though TableNOC is currently just a research prototype, the application has already turned a significant profit for Ivrnet.

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For SurfNet contact information please go to:
www.nsercsurfnet.ca/pmwiki.php?n=SurfNet.Contact
For more information about the SurfNet Summer Workshop please go to:
http://www.nsercsurfnet.ca/pmwiki.php?n=SurfNet.SummerWorkshop

Registration will open in May; please consider what kinds of topics you would like to see in the tutorial sessions and whether or not you would be interested in presenting a tutorial.

The SurfNet Industry Session will be held on Thursday, September 27. This will be a good opportunity for our industry partners to meet the students involved in SurfNet projects, and vice versa.

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