
Ritchie the DeskBuddy

Dhananjai Hariharan

Rochester Institute of Technology
Rochester, NY 14623, USA
dh1723@rit.edu

Tiago Justino

Rochester institute of Technology
Rochester, NY, 14623, USA
tvj6825@rit.edu

Abstract

TODO

Author Keywords

Authors' choice; of terms; separated; by semicolons; include commas, within terms only; required.

ACM Classification Keywords

H.5.m [Information interfaces and presentation (e.g., HCI)]: Miscellaneous; See [<http://acm.org/about/class/1998/>]: for full list of ACM classifiers. This section is required.

Introduction

There are a wide variety of resources available to people to keep track of events and activities, remind them about these, and to make them more productive. Two approaches are commonly used: 1. using physical reminders such as post-it notes and diaries. The drawback here is that the user is physically constrained. For example if the user has post-it notes at home, these notes aren't accessible when she is in the library; and 2. using software reminders, such as Google Keep and Google Calendar. Although they are available to use for free, these are easy to ignore as they only exist virtually (only provide simple notifications) and are not reflected sufficiently enough in the physical world.

This project attempts a new approach to this application.

Paste the appropriate copyright statement here. ACM now supports three different copyright statements:

- ACM copyright: ACM holds the copyright on the work. This is the historical approach.
- License: The author(s) retain copyright, but ACM receives an exclusive publication license.
- Open Access: The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

This text field is large enough to hold the appropriate release statement assuming it is single spaced in a sans-serif 7 point font.

Every submission will be assigned their own unique DOI string to be included here.

What if it were possible for a physical object in a user's space that could draw attention and spark user reaction in a more effective manner? What if there could be an object that can play the role of a friend that reminds a person about the occurrence of an event? Wouldn't it be great if someone were to tell you to stop what you were doing and keep up with your new year resolution of running 5K everyday? Graphical User Interfaces, by their nature, do not create an emotional bond with a user in most interfaces. Having an emotional bond with an object can greatly enhance user experience with that particular object, irrespective of the simplicity of its purpose.

Ritchie the DeskBuddy is just the device for the role. Ritchie is a 3D printed robotic tiger that sits on a user's desk and reminds them of events or activities that need to be done. As an internet-connected device, Ritchie can be of great utility when provided with pertinent data sources. To be clear, Ritchie is not an AI robot. It cannot tell you what you need to do, or tell you about the weather. Nor can it specifically remind you to buy some eggs on your way back home. What Ritchie can do is wave its arms and move around to get your attention about something important. The rest is upto the user to check on the topic of concern. The events can range anything from small everyday events to more important things that demand immediate action.

Related Work

Peek et. al [4] describe Hangster, an ambient display that embodies virtual interactions using physical devices hanging on strings. These devices are designed to look like personalized avatars. Hangster allows a person to see their friend's status (online/offline) on a messaging application (by lowering/raising the avatar), and allow some simple interactions - e.g. initiate a conversation by gently tugging

on the avatar string, show notifications by moving. Dino¹ is an ambient display that controls a physical object to react to the nature of conversations on a chat application. By studying the content of the conversation, the "egg" moves to show whether it is happy, sad, angry or calm. Similarly, Availabot² is a computer-controlled push puppet that stands or falls down to reflect a friend's availability (online/offline status) on a chat application.

REFERENCES

1. Jens Fortmann, Tim Claudius Stratmann, Susanne Boll, Benjamin Poppinga, and Wilko Heuten. 2013. Make me move at work! An ambient light display to increase physical activity. In *Pervasive Computing Technologies for Healthcare (PervasiveHealth), 2013 7th International Conference on*. IEEE, 274–277.
2. Hiroshi Ishii and Brygg Ullmer. 1997. Tangible bits: towards seamless interfaces between people, bits and atoms. In *Proceedings of the ACM SIGCHI Conference on Human factors in computing systems*. ACM, 234–241.
3. Nassim Jafarinaimi, Jodi Forlizzi, Amy Hurst, and John Zimmerman. 2005. Breakaway: an ambient display designed to change human behavior. In *CHI'05 extended abstracts on Human factors in computing systems*. ACM, 1945–1948.
4. Nadya Peek, David Pitman, and others. 2009. Hangsters: tangible peripheral interactive avatars for instant messaging. In *Proceedings of the 3rd International Conference on Tangible and Embedded Interaction*. ACM, 25–26.

¹Dino - Ambient Display Creature: <https://www.youtube.com/watch?v=AvST9wjrkC4>

²Availabot: <https://www.youtube.com/watch?v=w0voYnEjFcQ>

5. Yvonne Rogers, William R Hazlewood, Paul Marshall, Nick Dalton, and Susanna Hertrich. 2010. Ambient influence: Can twinkly lights lure and abstract representations trigger behavioral change?. In

Proceedings of the 12th ACM international conference on Ubiquitous computing. ACM, 261–270.