Decorative Information Display in Everyday Environment

Itiro Siio[†], Yuri Ida[‡], Hiroshi Miyazawa[†], and Fusako Kusunoki[‡] [†]Faculty of Engineering, Tamagawa University 6-1-1 Tamagawagakuen, Machida, Tokyo, 1948610 Japan. siio@acm.org [‡]Information Design, Tama Art University 2-1723 Yarimizu, Hachioji, Tokyo, 1920394 Japan. kusunoki@tamabi.ac.jp

1. Introduction

In the near future, we will be using many single purpose information appliances equipped with ubiquitous, invisible computers. One of the most profitable applications of ubiquitous computers will be simple information suppliers in an everyday environment. While there are some preceding studies on building decorative displays for weather, traffic and email information [1], [2], there is room to invent new expressions of the Internet information in our daily lives.

2. Everyday Information Display

We have implemented a framed LCD that displays the weather forecast from information obtained via the Internet (Figure 1). The 15 inch LCD is connected to a PC with Windows XP. A Perl program on the PC periodically fetches information from weather forecast web sites ¹ and updates weather information ² in a specified text file. We have created several Flash and Visual Basic programs to display a dynamic illustration reflecting the text file.

Two of the dynamic illustrations are shown in figure 1. The upper work shows animated sea animals and displays weather information by their particular actions. The lower one has Mondriaan-like color blocks that change to warm colors on fine, hot, and dry days, and to cold colors otherwise. We have equipped them with an infra-red motion sensor to detect the proximity of a human body, to display additional literal weather information when a user approaches the frame.

References

 L. E. Holmquist and T. Skog. Informative art: information visualization in everyday environments. In *GRAPHITE '03: Proceedings of the 1st international conference on Computer*



Figure 1. A framed LCD displays the weather forecast as distributed on the Internet, with animation (above) and color blocks(below). When a human approaches the display, additional literal information will appear.

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[2] J. Stasko, T. Miller, C. Plaue, Z. Pousman, and O. Ullah. Personalized peripheral information awareness through information art. In *Ubicomp 2004: Ubiquitous Computing*, pages 18– 35. Springer, 2004.

¹ such as http://www.tenki.jp/yoh/y44.html

² Weather, probability of rain, and high/low temperature forecast.