

# Can You See Me Now?

**Matt Adams, Ju Row Farr, Nick  
Tandavanitj**  
Blast Theory  
Unit 43a Regent Studios  
8 Andrews Road  
London  
E8 4QN, UK  
{matt, ju, nick}@blasttheory.co.uk

**Steve Benford, Martin Flintham, Adam  
Drozd, Rob Anastasi**  
The Mixed Reality Laboratory  
School of Computer Science and IT  
The University of Nottingham  
Nottingham  
NG8 1BB, UK  
{sdb, mdf, asd, rma}@cs.nott.ac.uk

## INTRODUCTION

Can You See Me Now? is a ubiquitous artistic game that mixes street players who use mobile, location-tracked devices, with online players who use conventional PCs connected over the Internet. The game serves as both a professional touring artwork and a research project that has enabled emerging ubiquitous technologies to be studied ‘in the wild’, i.e., as used by the public on the streets of actual cities throughout the world. At the time of writing, Can You See me Now? has been staged in Sheffield (2001), Rotterdam (2003) and Oldenberg (2003) and papers describing the experience have appeared at CHI 2003 [3], CHI 2004 [2] and in IEEE Pervasive Computing [1], focusing on issues such as how players, performers and technical crew are affected by and deal with the uncertainties that are inherent in positioning and wireless communications technologies. Can You See Me Now? has also been awarded the 2003 Prix Ars Electronica Golden Nica for Interactive Art.

*Can You See Me Now?* is a game of catch – but with a twist. Online players are chased across a virtual city by street players, who have to run through the *actual* city streets in order to capture them. Up to fifteen members of the public at a time can be online players, accessing the virtual city over the Internet. The four street players, referred to as ‘runners’, are professional performers, who chase online players through the city streets using handheld computers with wireless network connections (using 802.11b) and GPS receivers. The online players can move through the virtual model of the city at a fixed maximum speed, can access various views of the city streets, can see the positions of other players and the runners, and can exchange text messages with one another. As the runners move through the city streets they can see the positions of the online players and other runners on a handheld map, can see the players’ text messages, and can communicate with one another using walkie-talkies. The runners’ walkie-talkie communication is streamed to the players over the Internet,

providing real time descriptions of the runners’ actions and their experience of the city streets including reports of traffic conditions, descriptions of local street scenes, discussions of tactics, and the sounds of the physical labour involved in tracking players down.

This video documents Can You See Me Now? from when it was first performed in Sheffield in December 2001. It provides an introduction to the structure of the experience, the technologies involved and provides an impression of the typical activities of the online players and the ‘runners’ on the streets.

## ACKNOWLEDGEMENTS

This research has been supported by the Equator project, funded by the Engineering and Physical Sciences Research Council (EPSRC) and also through support from the Arts and Humanities Research Board (AHRB).

## REFERENCES

1. Benford, S., Anastasi, R., Flintham, M., Drozd, A., Crabtree, A., Greenhalgh, C., Tandavanitj, N., Adams, M., Row-Farr, J., Coping with uncertainty in a location-based game, *IEEE Pervasive Computing*, September 2003, 34041, IEEE Press.
2. Crabtree, A., Benford, S., Rodden, T., Greenhalgh, C., Flintham, M., Anastasi, R., Drozd, A., Adams, M., Row-Farr, J., Tandavanitj, N. And Steed, A., Orchestrating a mixed reality game ‘on the ground’. In *Proceedings of the 2004 CHI Conference on Human Factors in Computing Systems*, Vienna, April 2004, ACM Press.
3. Flintham, M., Anastasi, R., Benford, S., Hemmings, T., Crabtree, A., Greenalgh, C., Rodden, T., Tandavanitj, N., Adams, M. And Row-Farr, J., Where on-line meets on-the-streets: experiences with mobile mixed reality games. In *Proceedings of the 2003 CHI Conference on Human Factors in Computing Systems*, Florida, April 2003, ACM Press, 569-576.