

Let's Rendezvous: Application of Location-Aware Computing

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POSITION STATEMENT

Our current project focuses on the use of location-aware computing during social activities. The particular social activity we are investigating is rendezvousing (two or more people meeting at a time and place). A body of research [1, 2, 3] has identified rendezvousing behaviors through diary studies. Our focus is the integration of handheld technology and location-aware devices to aid in the act of rendezvousing.

Most technologies (cell-phones, instant messaging clients, etc.) used for rendezvousing do not implicitly provide users with an awareness of location. The awareness of location comes from one person being able to textually or verbally describe a location to another. This is problematic as the communication of instructions or descriptions between persons may be ambiguous, misinterpreted or misunderstood. People may not even know their current location. Location-aware computing avoids the complications associated with verbal and textual communication by providing visual cues and references. For example, a digital map on a location-aware device could be annotated or overlaid with location information. Each participant in the rendezvous would be able to visually see the location of the prearranged rendezvous as well as the location of other participants.

The annotation of a digital map with location-aware information is not new or particularly innovative. The exciting aspect of our rendezvousing project is our exploration of the social impact location-aware devices will have on rendezvousing. Given that each participant will have a visual indication of the relative location of their partner, how will this affect their decisions and actions during the rendezvous? For example, if one person is late and another is waiting at the prearranged location at the specified time, how will each person react? Will the late person pick up their pace or will the waiting person abandon the prearranged location and re-negotiate a new location? The implications of location-aware computing on social navigation are vast and we hope to make some initial observations concerning its social impact.

In addition to exploring the implication of location-aware computing during a rendezvous, we are hoping to explore the effect of revealing emotional and state information. Using a non-descript dot or arrow to indicate position on a location-aware device does not convey information beyond relative locations and possible direction. Seeing that a person is located within a given area (such as a specific shopping store) does convey possible information about personal interest, yet it does not reveal anything about the current emotional and physical state of a person. Stress [2] has been identified as a primary outcome of rendezvousing. It is anticipated that conveying emotional information will have an impact on the outcome of a rendezvous and the behavior of the persons participating.

Our studies exploring the use of handheld technology and location-aware devices in rendezvousing are currently in progress. The results will be available at the time of the 'Applications of Location-Aware Computing' workshop.

BIOGRAPHY

David Dearman is a graduate student in Computer Science and a member of the EDGE Lab, Dalhousie University, Nova Scotia, Canada. His current thesis research focuses on the use of handheld technology and location-aware devices to aid in the social act of rendezvousing. Interests include the social and personal impact of location-aware computing, annotating physical locations with virtual information (specifically emotional information) and co-located/non-co-located computer-supported collaborative work. David is working under the supervision of Dr. Kori Inkpen.

REFERENCES

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