

Adam Muehlhausen

*Location Aware Computing Using Static Bluetooth Tags*

Abstract:

ActiveMap is an ongoing project to create an interactive, indoors tour guide system. A tour site has static Bluetooth tags scattered about the building whose locations are known by the software on the laptop. As the user walks around the building, the software searches for Bluetooth tags in the area, and based on the signal strength of each of the tags, can determine which location in the building the user is currently at. Once the location of the user has been determined, ActiveMap can then give information about the area to the user, visually and/or audibly. My research has been with the Bluetooth communication and location management aspect of ActiveMap, such as connectivity, determining signal strength, and learning and recalling locations.