In October 2005, I was invited, along with Eric Paulos of Intel Research, Berkeley, to design a live media installation at the San Francisco Museum of Modern Art (SFMOMA). The piece was entitled 180x120. 180 RFID (radio frequency identification) tags were used to track the presence and location of a crowd of people over a designated period of time, 120 minutes. This information was used to create a real-time public visualization that revealed crowd intelligence, patterns of group distribution, zones of intensity, and preferred locations.

This work was a collaboration between information technologists and architects. Its aim was to spatially visualize real time data of crowd behaviours. My contribution was in relating the material and information systems, specifically the design and fabrication of the interface through which the evolving digital display could be matched to a material substrate.

180x120 is an early example of a live data driven media installation. Our research aims were to interrogate the relationship between private, physical location and public consumption of this (now easily available) information, raising issues around privacy and the extent of personal boundaries in information space. This research explicitly explores the creative possibilities between digital information and encoded material systems marking a moment of temporal, material and digital synthesis. Furthermore, our aim was to explore and understand the spatial and visual consequences of this alignment. This blending of interactive media and performance based (crowd based) art was a novel contribution to new media practice and research at the time.
ANTHONY BURKE
180x120: Designing Alternate Location Systems

2008005236
Original creative work

1. View of live visualization projected onto the tessellated surface of the screen

2. Laying out the laser cut and folded panels used in the assembly of the screen

3. Close-up of projected screen

4. View of wireless RFID antenna. The overall system used four antennas attached to a single Alien ALR-9780 reader. Java code was used to parse the data from the reader and generate the visualization and one of the 180 numbered RFID tags. (The tags distributed were the ALL-9350-02 I RFID Tag.)