

TeleTourist: Telepresence Tourism for Mobility-Restricted Participants

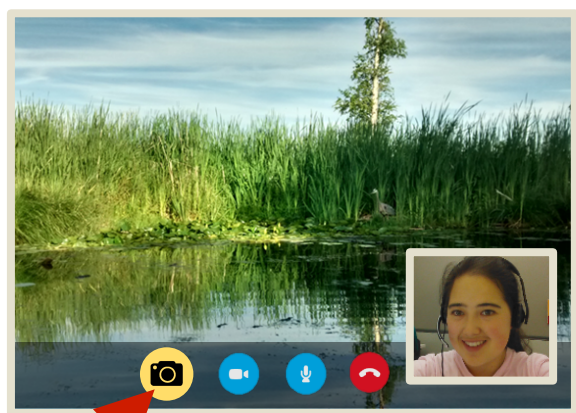
Concept

Video calls can enable people to experience activities otherwise inaccessible. A tourist in Paris could participate in a video call using a phone’s back-facing camera to virtually “bring along” people who cannot leave their homes but wish to travel. A patient bound to a hospital bed could virtually experience paragliding through a similar video call with someone who is paragliding. TeleTourist is a system to facilitate and augment video calls to share such experiences between strangers and people with mobility restrictions.

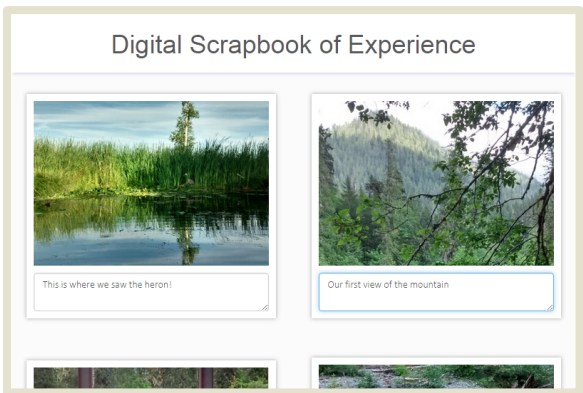
Goals

- Offer windows to the world outside the walls someone is bound to
- Make the experience immersive and personalized
- Increase a sense of social connection for those who may feel isolated

Virtual Scrapbooking

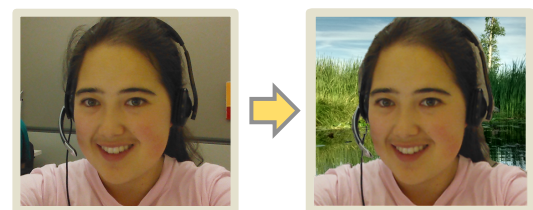


Button for capturing pictures of experiences during video calls.



Digitally scrapbook images captured during experience.

Background Replacement

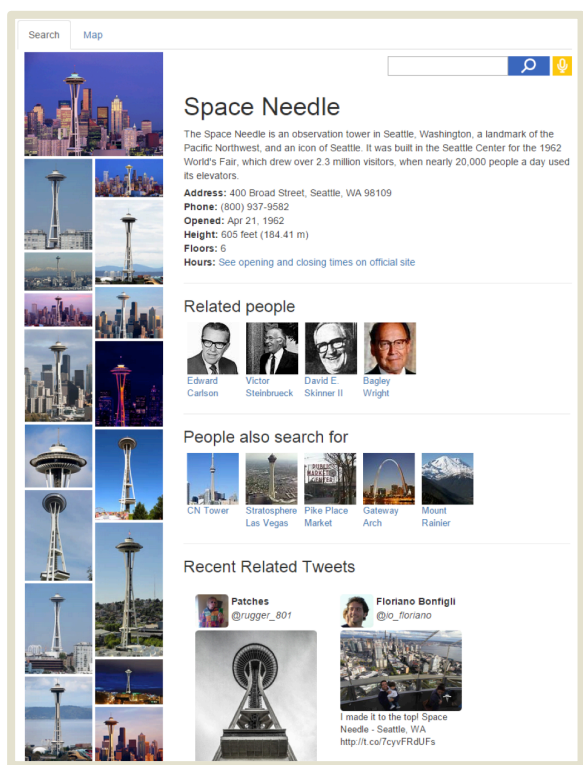


Replace background with image from remote location.

Matching System

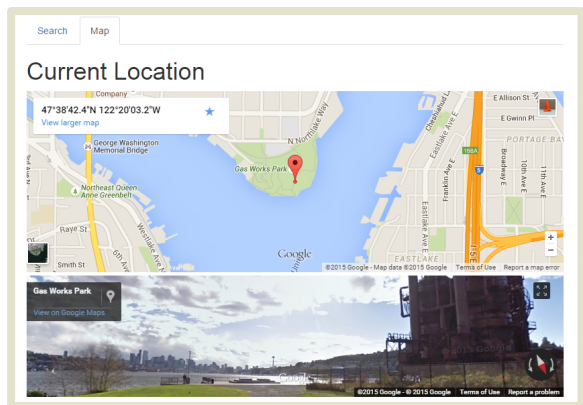
Future work: automatically match participants for different experiences using shared interests and scheduling constraints, and optionally GPS location. Also enable manually initiated matches from browsing listed activity ideas.

Display Relevant Information



Display relevant information about a topic from manual searches or implicit automatic searches using phrases extracted from speech recognition, activity descriptions, or remote participant location.

Real-Time Map



Display map and Street View of remote participant location.

Evaluation

Future work: study the experience for participants with mobility restrictions to investigate whether and how specific features

- improve or detract from feelings of immersion (i.e. whether they were helpful or distracting).
- influence the sense of social connection.
- improve a sense of purpose.
- engage participants in a more active or passive role.
- influence overall enjoyment and satisfaction.