Bringing real-time visibility to Forests for Sustainability

Position paper by Mónica Mendes

With this paper, I am presenting a point of view based on my ongoing research work on making real-time video of forests *visible*, by *acting* through exploratory development of interactive installations towards environmental *sustainability.*

I am addressing the "Research into domain-specific sustainability issues" topic of this workshop, with a focus on sustainability awareness for forests protection. This is meant to be achieved through collective shared surveillance and artistic explorations.

Introducing RTIVISS

Combining physical and virtual worlds, Real-Time Video Interactive Systems for Sustainability – RTiVISS – offers participants a way to remotely monitor natural environments for forest protection. The interactive systems feed a community that enables self sustained surveillance and explorations with digital media in interactive installations that engage the audience senses in unconventional ways.

These interactive experiences are meant to stimulate awareness and prevention of fire related damages to the forests. The outputs are a trade-off between aesthetic pleasure from contemplative observation and interactive experiments of forests real-time videos. RTiVISS will also explore a tense feeling of control over danger and functional monitoring for forest protection in a surveillance system, aiming to promote a more sustainable world through digital media and experimental design.

The outcomes of this iterative process include:
• Interactive installations for public exhibition with real-time video of the forests as raw material
• An online platform prototype proposal, to display the real-time forests videos and correspondent artistic explorations
• The design of a surveillance open source hardware and software kit common to all the interactive installations. Resulting video streams and collected data will be uploaded and become part of the online platform network.
All together, we hope that these interactions provide the experiences of contact with nature contributing to a feeling of belonging, strengthening the relationship with the forest, and leading to local communities growth and empowerment.

Hug@ree, Treeellucinations, B-wind!, and *Play with Fire* are the art installations being collaboratively developed and showcased in multidisciplinary exhibitions, such as Future Places, Popup City, ACM Multimedia, AZ Labs, TEI, and soon at SXSW.
Involving the collaboration of artists, activists and technologists, these systems strengthen environmental awareness through "the emotion of real-time", in an innovative approach - with a challenging technological component - that comprises a strong dimension on social and natural sciences merging New Media Arts and Sustainability.

Contribution to this workshop

At the workshop, I propose to share my experience and research work with the participants and to discuss in the broader scope of HCI how to design interactive experiences that bring visibility and foster awareness and respect for nature.
Additionally, I would like to get feedback on the project team's proposal to repurpose surveillance technology into DIY kits that bring people and their communities together to protect their forests.