

# YooSee: A Video Browsing Application for Young Children

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## EXTENDED ABSTRACT

Nowadays children as young as two years old can easily interact with mobile touch screen devices and personal computers to watch online videos through services such as YouTube. However, such services present a number of challenges for young children (e.g. fine grain gestures/interactions and good typing/literacy skills). In addition, when children use such services there is a risk that they may stumble upon content that is inappropriate. YooSee<sup>1</sup> is a web-based application developed using the PuppyIR framework [1] and designed for children aged between two and six years old. YooSee enables children to: (1) search and browse through video content using an engaging, novel interaction paradigm, and (2) be able to safely enjoy moderated video content.

The application was motivated by a desire to address the issues that children have with text based searching. In [2], Druin *et al* show that children face a number of problems associated with formulating queries, such as: spelling, selecting the right words, and the use - or not - of natural language. Additionally, in [3], it was found that children prefer to browse through content. YooSee avoids the problems associated with querying by providing a novel interaction paradigm based around a *globe* of videos for children to explore. Conceptually the globe can be thought of as a series of carousels containing videos: where the interaction paradigm allows two forms of browsing/scrolling:

1. **in carousel** to access similar and related content, and,
2. **between carousels** to access different content.

Providing content around a globe allows the child to have seamless and continuous interaction with the content provided i.e. as they with move around the carousels, or move between carousels, they will eventually loop around the globe.

YooSee also adopts a minimalist interface in response to concerns raised in [2] about the information overload experienced by children. Consequently, only a small part of the content space is presented at once as shown in Figure 1,

<sup>1</sup>See <http://www.dcs.gla.ac.uk/access/yoosee/>.

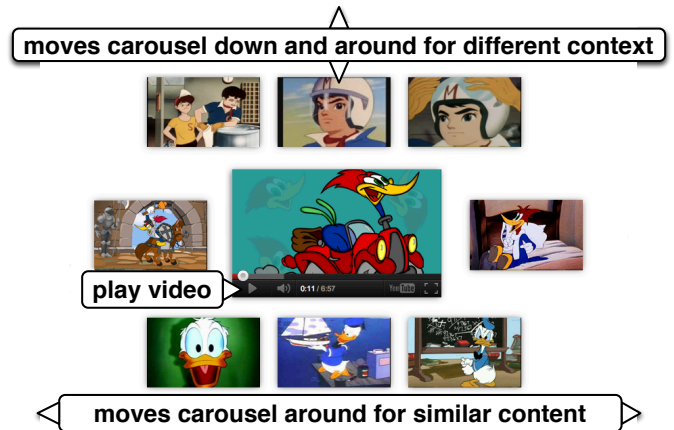


Figure 1: YooSee in action.

where a 3x3 grid of thumbnails is presented except for the central thumbnail which is larger and enables the child to watch the embedded video inline. The child is able to navigate through the space browsing up or down, i.e. *between carousels*, or left and right i.e. *in carousel*, or they can watch the video that is currently in focus.

The moderation of the content is controlled by the parent/guardian of the child. This is accomplished via an administrative section of the application. In this section parent/guardians can manage the various carousels available (adding content by searching for YouTube clips, adding / deleting carousels, etc). While this step is manual, it provides the parent with complete control, and means they only have to find the items that their child likes once, rather than repeatedly searching for the content that their child enjoys. Once setup, children can enjoy their favourite content in a moderated and safe environment. In future work, we will explore how children engage with this novel interaction paradigm, and whether they can easily and quickly navigate to their desired content (over other possible interaction paradigms).

## REFERENCES

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