

# Just In Time Learning with Google Glass

Scott Greenwald, Christian Vázquez, Mina Khan and Pattie Maes

Department of Media Arts and Sciences, Massachusetts Institute of Technology

## Motivation

Mobile learning applications offer great promise, taking learning off of the desktop, out of the classroom, and into the world. Handheld touch-screen devices, however, have the drawback that their use disrupts the learner's ongoing activities, requiring both the hands and the eyes to be available.

## Goggle Glass

- **Google Glass** allows us to compile, process, and present data without disrupting the continuity of ongoing activities.
- We take advantage of **Google Glass's** ability to present just-in-time information to enhance mobile learning experiences

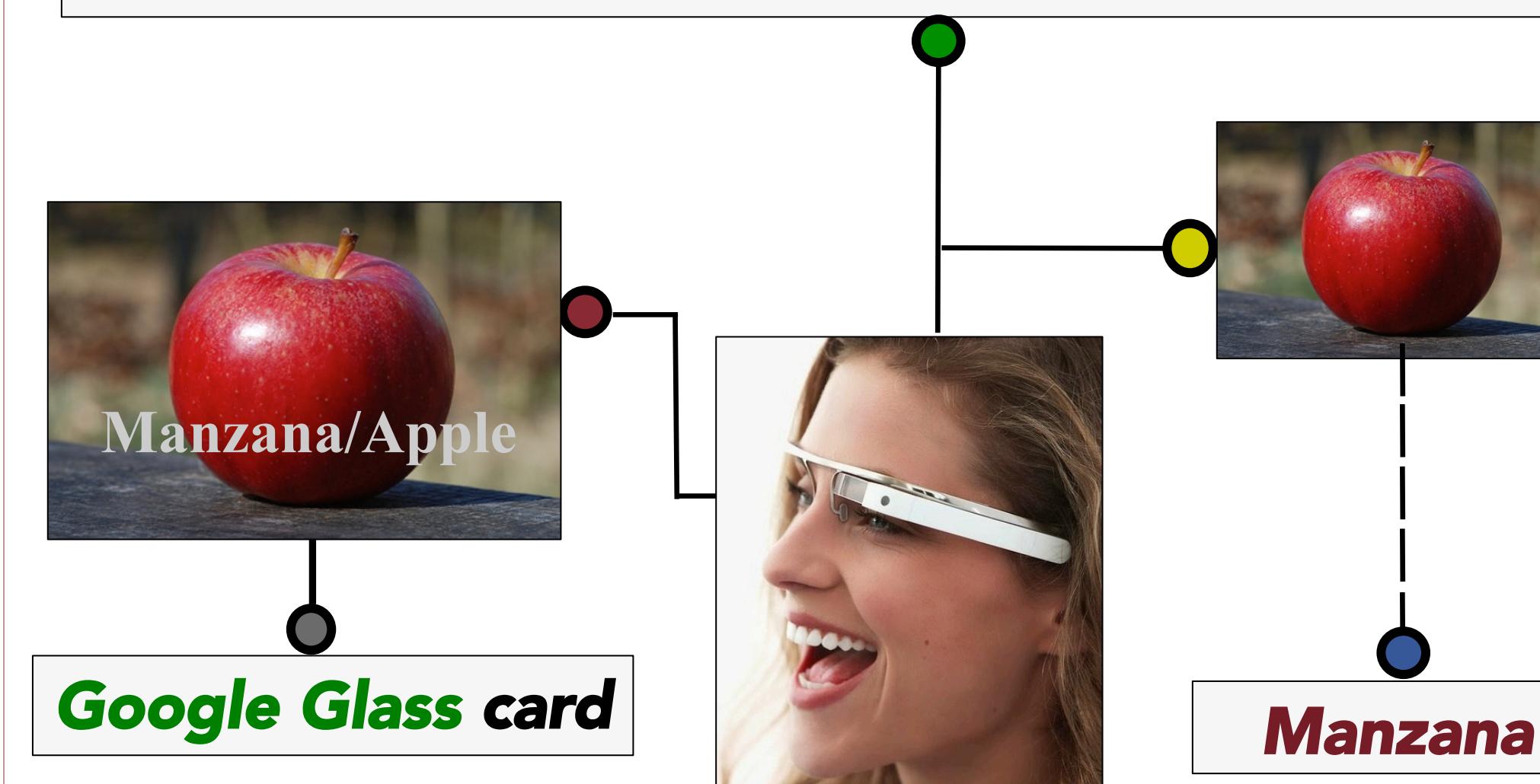


## TagAlong

**TagAlong** is a system that focuses on the collaborative component of learning and remote task assistance. It was envisioned to provide a contextual language learning experience.

### Contextual Learning

With **TagAlong**, users are able to associate foreign language words with the physical objects they describe, while situated in contexts and surroundings where they occur.



## Application Flow



Tags



User

Pictures are streamed from the user's **Google Glass** at regular intervals. The user receives cards with tagged objects and their translation in the targeted language from the worker.

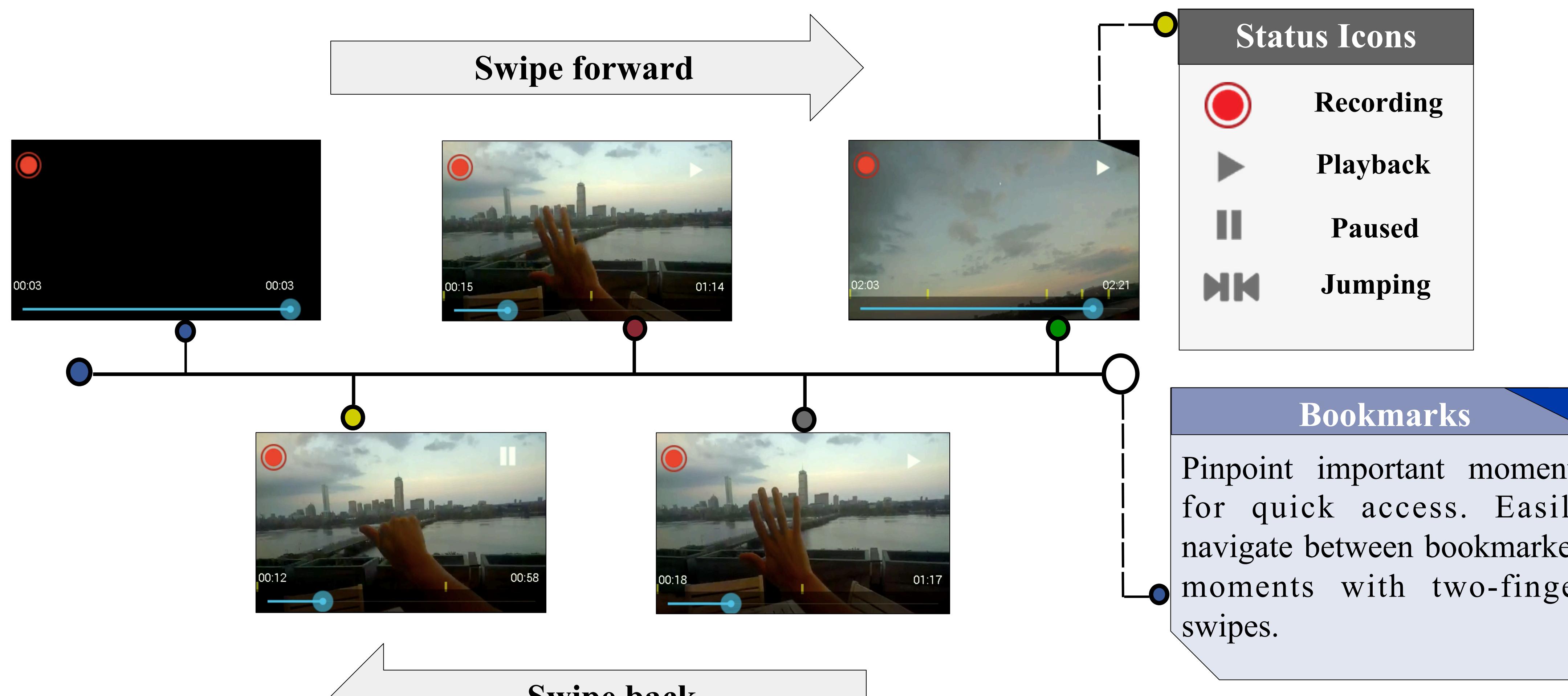


Companion

A remote companion receives pictures in web client and tags prominent objects. The companion submits the objects translated word and sends a tag back to the user.

Pictures

## Application Flow



## Take Two

**Take Two** is a prototype application that enhances a more personal component of learning by providing a virtual extension of memory.

**Google Glass** captures audio and video that can be conveniently reviewed with seamless interactions.

Rewind 1

Lost in a lecture?  
Look back with a few swipes.

Found the information?  
Take a minute to replay it.

Review 2

Resume 3

Lecture is not over?  
Keep on learning.

## Future Work

- **Take Two** will include quicker lookup methods such as video subtitles, speech activity detection, bookmark selection, and video scrubbing
- **TagAlong** integration with a crowd source engine such as Mechanical Turk
- A laptop client for **Take Two** to allow long term footage retrieval and review
- Allow the user to make specific tag requests of objects in their environment in **TagAlong**

## Acknowledgements

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