CoLT: Enhancing Collaborative Literature Review with Synchronous and Asynchronous Awareness Across the Reality-Virtuality Continuum

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COLLABORATION WITH INTERNATIONAL RESEARCHERS





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LITERATURE REVIEW FOR SURVEY PAPER



System Requirement



A tool to read, annotate, and organize papers



Collaborate with others to generate insights



Support collocated and remote collaborators



Support synchronous and asynchronous collaboration



System Requirement

Reality Virtuality Continuum (RVC)

Reality

Augmented
Reality

Augmented
Virtual
Reality

Reality



Scenario

Reality Augmented Augmented Virtual Reality Virtuality Reality

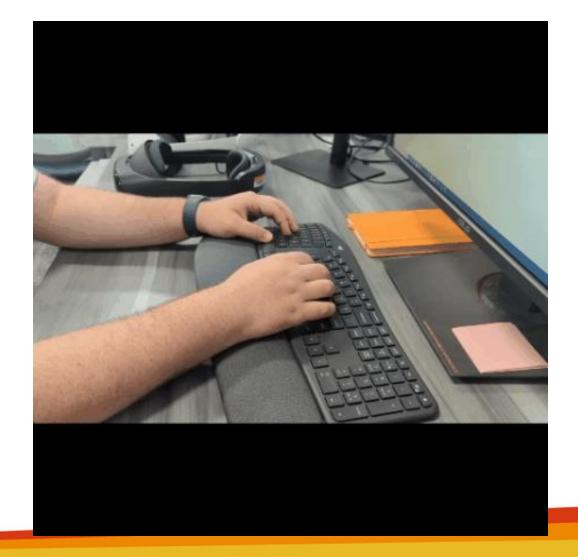
- Alice, Max and Trudy are working on a survey paper
- Alice and Max work at the same lab
- Trudy lives in a different country

Import from Real World

- Add annotations in real world
- Import annotations in Augmented Reality





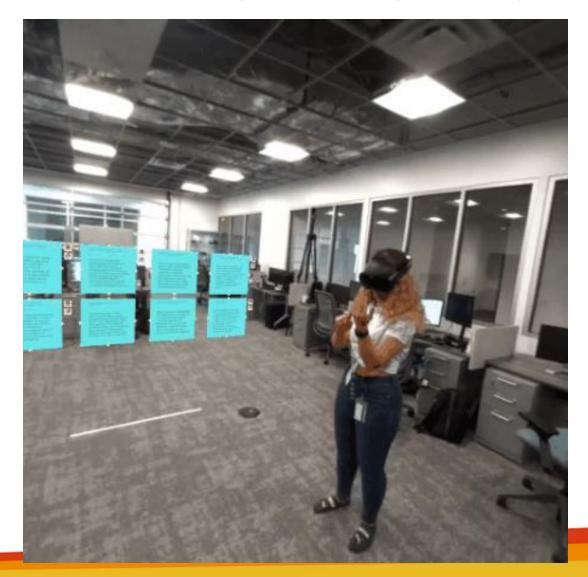




Collocated Users

Share with collocated collaborators



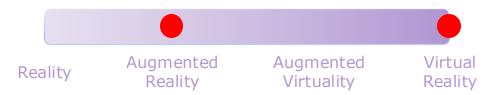




Remote Users

Share with remote collaborators

Reality Virtuality Continuum (RVC)



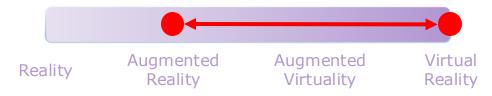




POV

Transition between AR and VR POV with double tap

Reality Virtuality Continuum (RVC)

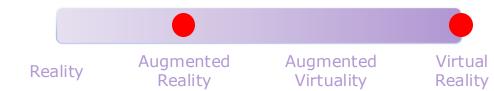


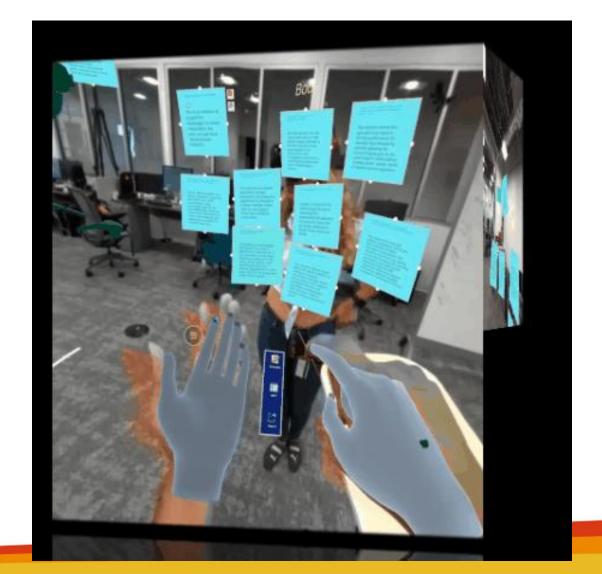




Write Statements

 Write down new findings about papers while being in the immersive space

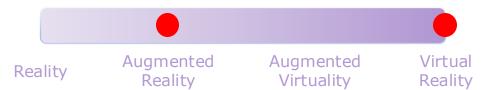


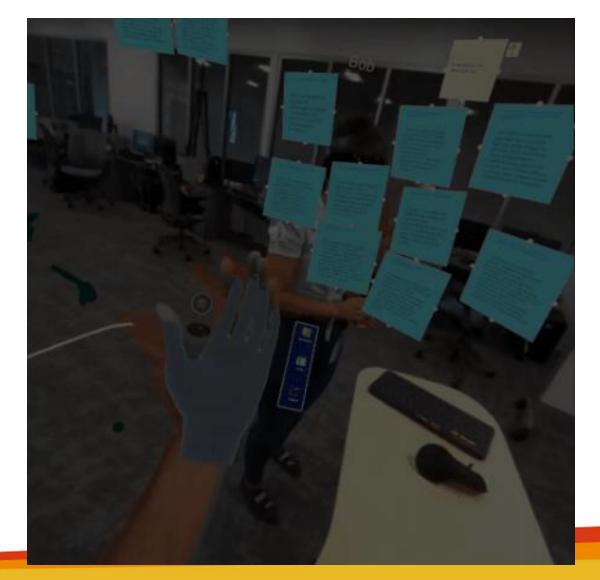




Write Titles

• Give new titles to your findings

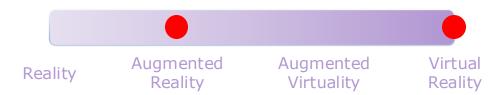




Create a Hierarchy

 Connect papers, statements, and titles to give structure to the layout





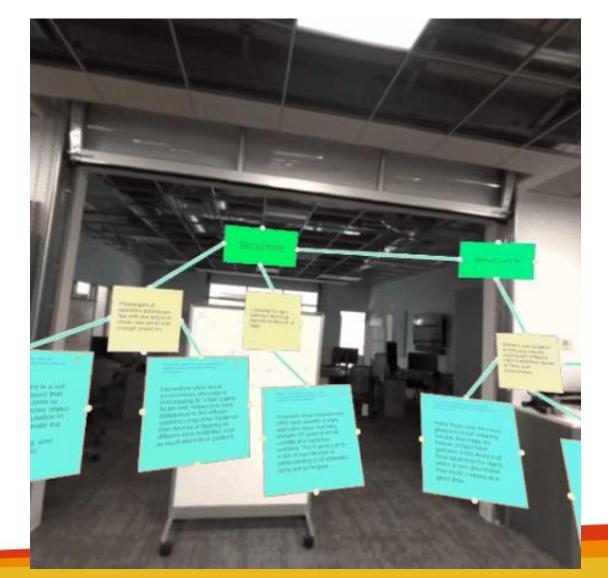




Export to LaTeX

• Export layout to LaTeX file







Persistent Layout



- The layout is saved for later use, or time-distributed collaborators
- Users can access the saved layout from any stage in the RVC



Thank You

Demo



Paper

















