News:

Use LLM wisely. It is suggested to manually navigate to the related parts, copy a short paragraph to LLM, and ask it to summarize using indent bullet point style, and finally manually double check. Claude 3 seems to be better than GPT 3.5, you can try free on Poe.

Please save the paper pdf into this folder [paper collection](https://drive.google.com/drive/folders/1IlMDKb94kS3TLQsNKcxBTMTLh3qLrf-z?usp=drive_link) for easy access.

* What application?
  + Entertainment
  + In-car office
  + Reduce car-induced motion sickness. (Compared to only-car baseline, wearing OHMD can decrease motion sickness.)
  + Reduce car&MR induced motion sickness (Compared to only-car baseline, wearing OHMD may still increase motion sickness; but compared to original in-car MR condition, the proposed methods (like peripheral hints) help to reduce motion sickness)
  + No specific real-world applications.
  + Others?
* User Experience
  + Motion Sickness
    - Reducing mismatch
      * Vestibular compensation
      * Visual compensation
      * Auditory compensation
    - Sense of anticipation
    - Attention shifting
    - others?
  + Immersion/Presence (Immersed to MR content)
  + Sense of existence in the moving vehicle
  + Work Efficiency
  + Others?
* Experiment
  + Mehod
    - Within Subjects
    - Between Subjects
  + Participants
    - Number of Participants
    - Filter conditions
    - Gender
    - Age Distribution
  + Confounding factors mentioned (may appear in experiment section or limitation, discussion section etc)
    - Age and user demographics
    - Others?
  + Independent Variables and Conditions
  + Dependent Variable and Measurement (what tools are used for collecting user data?)
    - Motion Sickness:
      * SSQ
      * MSAQ
      * others?
    - Immersion (Immersed to MR content)
      * IPQ
      * others?
    - Sense of existence in the moving vehicle
      * ?
    - Work Efficiency / In-car office
      * NASA-TLX (Workload)
      * others?
    - Others?
      * Others?
  + Apparatus
    - Purpose 1
      * Apparatus 1
    - Purpose 2
      * Apparatus 2
    - Purpose 3
      * Apparatus 3
    - Others?
  + Road and driving (driver) condition
  + MR content
    - Condition 1
      * Content category (major content that the passenger is focusing on, not the visual cues)
        + 3D game
        + 360° stationary video
        + 2D video
        + stationary 3D environment
        + dynamic 3D environment
        + 2D plane
        + others?
      * The motion of the content
        + The content is stationary
        + The content is in motion

The content’s motion aligns with the motion of the vehicle

The content’s motion does not align with the motion of the vehicle

* + - * + The content is in rotation

The content rotates with head+car

The content rotates only with the head

The content rotates only with the car

* + - * + The content is changing but neither motion nor rotation
      * How is real-world information integrated to MR content?
        + This is an open coded area, we do not limit certain code.
        + It may have overlaps with “The motion of the content”, it’s OK to paste here and revise.
        + It may have overlaps with “Information Presentation and Transformation”, it’s OK to paste here and revise.
        + If the major content is neither in motion nor rotation, but some extra cues (visual, sounds, vibration etc.) were provided to improve the experience of major content, it is good to suggest here.
      * Please insert necessary figures here for easy understanding.
    - Condition 2
      * … same as above
  + Procedure / Sessions
    - Session 1
    - Session 2
    - Others?
    - Session Lasting time and participants’ rest
* Experimental Results
  + Motion Sickness
  + Immersion (Immersed to MR content)
  + Sense of existence in the moving vehicle
  + Work Efficiency / In-car office
  + Others?
* Interview Insights / Insights get from Qualitative user data
* Design guidelines and Best practices for in-car MR development

What can in-car MR app designers learn from this paper to improve their design?

* What kind of real-world information is captured?
  + Visual
    - Landscape?
    - Others?
  + Auditory
    - Engine Sounds?
    - Others?
  + Traffic
    - Road Conditions?
    - Traffic Light?
    - Near-by Viehicles?
    - Others?
  + Motion of Viehicle
    - Acceleration/Deceleration?
    - Uphill/Downhill?
    - Direction?
    - Bumping?
    - Others?
  + Others?
* Information Presentation and Transformation
  + Please also consider the author’s literature review here. Can refer to Yurou’s coding: [Qiu, et al., Manipulating the Orientation of Planar 2D Content in VR as an Implicit Visual Cue for Mitigating Passenger Motion Sickness](https://docs.google.com/document/d/1haJtBQdvngjBcel5ELYTUkbBT1TzUmD0WixRegXLBCA/edit?usp=sharing)
  + McGill et al. (2017) incorporated a real-time video stream of the outside world into the peripheral view of their MR content.
  + Cho & Kim (2022) adopted a transparent layer for the driver's perspective, allowing real-world elements to show through while overlaying additional information.
  + In contrast, Sasalovici et al. (2023) opted against transparency, instead directly using the real world as the background and placing their content (a quiz box with a white background) as an upper layer in the central area.
  + Like this ↑
* What non-MR motion sickness alleviation methods are mentioned in this paper?

Note: This part can occur in both the literature review section and methodology section, etc.

* + Minimize lateral oscillations?
  + Maintain stability?
  + others?
* Ethics and social issues and considerations authors mentioned
* Authors suggested future works
* Authors claimed Limitations of this work
* Other interesting discussion and insights (if any)
* Sundry items
  + In response to the guideline: “Emphasize quality even during low fidelity prototyping to shield users from poorly rendered content effects (Parades et al. 2018)”
    - Did authors talk about quality issues in this paper?
      * If so, what kind of settings are reported to be low quality by the authors?
      * or: How did this paper successfully overcome the quality problem?