

INTEGRATING VISUAL AND AUDITORY CUES IN IMMERSIVE VIRTUAL REALITY TO ENHANCE SPATIAL COGNITION AND COGNITIVE PERFORMANCE







Key Mechanics

- Pathfinding Tasks: 8 interactive objectives (e.g., deliver bread, retrieve a car key).
- Dynamic Barriers: Environment layout changes after each completed task.
- Teleportation Points: Quick-travel between major areas.
- Visual and Auditory Cues: Red and blue trees, directional sounds.
- Timed Challenges: Each task must be completed within 7–10 minutes.
- Environmental Reactions: Warning signs if stuck too long.

About the Project

- Experience an immersive 3D virtual world using a Meta Quest 3 headset.
- Test your memory and navigation skills across two dynamic city environments.
- Complete pickup and delivery tasks guided by visual (colored trees) and auditory (3D sounds) cues.

Test Your Skills:

How fast can you complete all tasks?

How well can you remember the environment?

Help us discover how sound and visuals improve spatial awareness!

Join for a fun and immersive VR experience!

EXPLORE. NAVIGATE. REMEMBER.

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