MUST-D: Multi-User See Through Display

Random Hole Displays (RHD)

- Have a hole mask that blocks visibility
- Data plane that shows multiple views simultaneously
- Per user position, only parts of screen are visible
- Hence the view is unique to each user

Fixed v/s dynamic mask

- With fixed mask, location of pixels visible to multiple users at the same time remains fixed
- With dynamic mask, the hole positions change and so collisions pixels move



Dynamic RHD see-through setup

- Two liquid crystal panels (LC)
- Front LC has its rear polarizer removed
- Dynamic mask on rear LC lights up data pixels on front LC in line of sight of user.
- Object placed in the LC gap is visible at all times.



Features

- See through, multi-view, multi-user
- Walk-up & use, no on-person accessories
- Stereoscopic view capable

Usage scenarios

• Shopping displays, Museum exhibits, activity demos



