

## EARS, an Attention-Directed Telepresence Robot



We developed a novel telepresence robot that automatically directs attention to a person of interest, e.g. a person who is speaking or one who appears in view. The robot is able to detect human voice, localize the speech source, and orients its camera and display towards the speech source. At the same time, it detects a person's face visually and automatically orients the camera to keep the person in view as he/she moves.

### Features

- Natural user interface by tracking human voices and faces using microphone array and web cam to control the display



## Potential Applications

- Videoconferencing
- Receptionist
- Tele-Healthcare
- Distance education
- Surveillance
- Security



## Benefits

- Increase productivity by reducing manpower and travel cost
- Affordable telepresence solution for mainstream market
- Portable standalone solution of a small form factor with sensors, computing units, and actuators are onboard
- Work in any room without requiring special infrastructure
- Ease of adoption with compatible to popular consumer smart tablets



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