

HCI Lec 03

Computer

- Computers are one such tool that have changed the way humans work.
- Human-computer interaction (HCI) focuses majorly on the study of interfaces that allows interaction between people and computers.

Technologies Increase Productivity Through Human-Computer Interaction

- Speech recognition
- IOT
- Eye tracking
- Cloud computing
- VR

Speech recognition

- Speech recognition technology can interpret human language
- Increase workers' productivity
- E.g chatbots, Apple's Siri, Amazon's Alexa, Microsoft's Cortana, and Google's Assistant ,these assistants, often found in portable devices such as smartphones or tablets, can each be considered a **'speech-based natural user interface'**

IoT

- IoT devices are basically smart devices which have support for internet connectivity and are able to interact with the other devices over the internet and grant remote access to a user for managing the device as per their need.
- [IoT applications are penetrating their way into our daily lives](#) and almost all the industries
- Interaction with these devices can also help increase workers' productivity
- Communicate or interact over the internet smoothly and can also be managed and controlled remotely when required
- One of the ways that employee productivity is being improved is through the increased possibilities for remote working

Cloud Computing

- Cloud computing is the delivery of on-demand computing services -- from applications to storage and processing power -- typically over the internet and on a pay-as-you-go basis.

VR(Virtual Reality)

- Immersive technology VR connect humans to the digital world and assist them while performing daily operations to increase productivity.
- **Virtual Reality (VR) is a computer-generated environment with scenes and objects that appear to be real, making the user feel they are immersed in their surroundings**
- Interact with computers in a fascinating hands-free way.
- E.g Smart glasses, Virtual Reality headset or helmet.

TOPICS

- 1. Amazon Dash Button**
- 2. Google Home Devices**
- 3. Smart doors and Doorbell Cam**
- 4. Kuri Mobile Robot**
- 5. Haptic gloves**
- 6. Smart glasses/google glasses**
- 7. Smart mirrors, smart irrigation**
- 8. Eye gaze system**
- 9. VR Mind Reading**
- 10. 3D Mouse**