

1. Modify the following texts so that the statements are true (choose the correct word from brackets).

A resistive touchscreen consists of (~~only two~~ **several**) layers, out of which the flexible plastic and glass layers are two important electrically (~~conductive~~ **resistive**) layers.

A capacitive touchscreen also consists of (~~many spaced~~ **two spaced**) layers of glass, which are coated with (~~resistor~~ **conductor**) such as Indium Tin Oxide.

2. Write the gesture types based on the notion of motion:

1. **static**
2. **dynamic**
3. **continuous**

3. Choose two main approaches used in Recommendation System scheme:

- ☐ linear regression
- X content-based**
- ☐ random recommendation
- X collaborative filtering**

4. Write at least three applications using gesture control (except TV control):

1. **TV control**
2. **Google maps**
3. **Clear – iOS application**
4. **professional coaching applications**
5. **Computer Aided Design (CAD)**
6. **drone navigation (Spark)**



5. Which are the technologies used in BCI solutions?

X transcranial magnetic stimulation

☐ electrocardiography

X electroencephalography

☐ electrooculography

☐ electromyography

6. What statements regarding eye tracking are true?

X can be used for mouse navigation

☐ solutions for HMD (head mounted displays) are not yet available

X there exist mobile binocular solutions

X eye tracker can be mounted below screen/monitor

7. Complete the paragraph with correct words

In a microphone, a diaphragm reacts to acoustic waves with vibration, which is converted into electrical signal. In a condenser microphone, a diaphragm serves as one of the condenser plates. This microphone requires power source. A dynamic microphone uses magnet inside a coil to produce electrical current when the membrane moves. Such microphone doesn't need external power source.

