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Was the content of the article relevant to current AT practice? Yes No

Was reading the article and completing the quiz a good way for you to learn? Yes No

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28.2D Quiz A Novel Mobile-Cloud System for Capturing and Analyzing Wheelchair Maneuvering Data: A Pilot Study

1. What is a period of continuous wheelchair movement called?

- a. A round
- b. A beat
- c. A rout
- d. A bout

ANSWER: _____

2. What is one main challenge associated with the mobile and cloud computing-based (MC) system?

- a. Sensors in a smartphone are very sensitive to light
- b. Duration of recording time
- c. Sensors in a smartphone are very sensitive to noise
- d. Ubiquitous nature of wheelchair maneuvering data

ANSWER: _____

3. According to the study, what is one significant characteristic of smartphone sensors?

- a. They are data driven
- b. They are time-sensitive
- c. They are event-driven
- d. They are process-driven

ANSWER: _____

4. According to the article, what is critical to accurate performance analysis?

- a. Determining amount of wheelchair movement, despite presence of noise
- b. Determining effectiveness of wheelchair maneuverability, despite environmental variances
- c. Ability to discern effectiveness of wheelchair braking performance
- d. Ability to assess nuances of wheelchair acceleration, taking gravitational drag into consideration

ANSWER: _____

5. What mechanism is used to optimally process wheelchair maneuvering data?

- a. Electroencephalography (EEG)
- b. Average Processing Algorithm (APA)
- c. Improved Common Average Reference ICAR) algorithm
- d. Average Data Reference Algorithm (ADRA)

ANSWER: _____

6. How many data vectors were prepared for each class?

- a. 12
- b. 24
- c. 36
- d. 48
- e. 60

ANSWER: _____

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7. What configuration of maneuvers was selected?

- a. 6 stationary maneuvers and 1 moving maneuver
- b. 2 stationary maneuvers and 5 moving maneuvers
- c. 3 stationary maneuvers and 4 moving maneuvers
- d. 6 moving maneuvers and 1 stationary maneuver

ANSWER: _____

8. Which technique is used to set up the system properly?

- a. Text-to-speech
- b. Speech-to-text
- c. Noise-to-data
- d. audio-to-speech

ANSWER: _____

9. What was attached on each side of the wheels of the wheelchair as a baseline?

- a. GoNowGTO accelerometer
- b. ActiGraphGT3X accelerometer
- c. GraphicAct3XTG mobilometer
- d. ActionGT accelerometer

ANSWER: _____

10. Concerning the accumulated maneuvering time, when did the authors' approach achieve the most similar result measured by the standard deviation (SD), standard error (SE), and p -value?

- a. When K was set to 5
- b. When K was set to 7
- c. When K was set to 3
- d. When K was set to 1

ANSWER: _____

11. What is the name of the filter widely used to estimate the state of the system?

- a. Caldwell
- b. Calder
- c. Kalahara
- d. Kalman

ANSWER: _____

12. How long do the acceleration and deceleration periods of a wheelchair usually last?

- a. Less than 3 seconds
- b. More than 3 seconds
- c. More than 5 seconds
- d. 1.5 seconds or less

ANSWER: _____