

Take Home Assignment

(HCI)

Answer the following questions.

- (1) What is the attention? Define top-down and bottom-up attention with examples. What is multi-tasking in relation to attention? Elaborate the implication of attention in human-computer interface designing.
- (2) What is the EEG? Brief the use of EEG in brain state (e.g. stress, work load, and attention) identification.
- (3) Define various eye movement matrices and its possible relation with various cognitive processes. Brief the use of eye tracking in HCI.
- (4) Describe the visual information processing the brain? Brief on visual perception.
- (5) Define various emotional states (valence and arousal model). How to identify and measure the emotion from a subject? (facial expression, EEG, ECG, GSR, speech etc.)

Note

- Length of each answer at least 500 words
- Submit soft copy naming 'StudentID_StudentName_HCI-Assignment.pdf'. Keep text format Times Roman, text size 12 pnts, and single spacing.
- If plagiarism (from the web or among students [so don't give your answer to other students]) is found, the lowest score will be assigned.