COMP6620 - Signal Analysis for Computing

Mini-project assignment brief

Overview
For this individual assignment, you are required to complete a **single** submission on a mini-project topic on a signal analysis problem. You will investigate a signal analysis topic and write a brief report that describes the developed code of at most **four A4 pages** words excluding the reference list accompanied by utilised MATLAB program that has no length restriction.

Deadline
Wednesday, week 11, 23:55, 08/12/21 (raptor submission)

Submission of your work
In this assignment, your job is to analyse electroencephalogram (EEG) data obtained during steady state visual stimuli (known as steady state visual evoked potential or SSVEP). On raptor, in the directory \\raptor\exports\courses\comp6620\, you will find the necessary Matlab (.mat) file that contains the SSVEP data to work on (which is different for every student, check your respective folder).

Submit all necessary files in: \\raptor\files\proj\comp6620\project\. Each student has a folder on raptor where you should submit documents electronically and where you can store documents you are working on.

Additional note
If you have trouble with the submission site, you must contact me or your class teachers as soon as possible to rectify the issue. Raptor folder access will be lost immediately after the deadline.

This assignment is worth 50% of the module. 25 marks will be for your code and another 25 marks for your explanation; hence it is very important that you explain clearly on your code development using comments and in the additional report.

Please read the following rules before you start:

- You are allowed to use only MATLAB for the coding.
- The report must be in one document only (PDF format) but accompanied by one MATLAB file that include all the codes.
- Along with your code for the assignment, mention any specific configuration parameters you have used that are not default in your report and any further instructions needed to compile and run your code (like comments). Be sure to add your name and UKC login at the top of all files.
- If your code doesn't run or compile with your instructions, your work will be marked based on inspection of the program and the explanation, so you will potentially get less than the full marks

(perhaps none). Thus, it is your responsibility to make the instructions/comments clear and complete.
- If you are unable to upload the MATLAB file, try zipping the file.

It is essential that you raise any problems in accessing the SSVEP data with me or class teachers as quickly as possible in order to resolve those problems.

The report only needs to have information that allows the markers to understand the developed codes and the obtained results. For example, why/how a certain filter settings/parameters were chosen, what approach worked better/worse (if you did any comparison) etc. You **should** include any generated figures or snippets of codes as appropriate. References as appropriate should be included.

You can include any other information that you feel is relevant to increase the understanding of the codes in the report.

It will also be useful to include comments with the Matlab codes to allow the markers to better understand your developed codes.

Plagiarism and Duplication of Material
The work you submit must be your own. Checks will be performed on all work submitted to identify possible plagiarism, and disciplinary action will be taken against anyone found to have committed plagiarism.

Some guidelines on avoiding plagiarism
One of the most common reasons for plagiarism is leaving work until the last minute. Avoid this by making sure that you know what you have to do (not necessarily how to do it) as soon as an assessment is set. Then decide what you will need to do in order to complete the assignment. There is a web page provided by the School of Computing concerning plagiarism http://www.cs.kent.ac.uk/teaching/student/assessment/plagiarism.local that answers some frequently asked questions concerning plagiarism and computing assignments.

Marked Work
Work that has been marked often contains valuable feedback that will help you improve your understanding of the concepts that have been assessed by an assignment. Accordingly, it is important that you read the marked work (via email) as soon as it becomes available.

If you have any questions/issues, please contact me or the class teachers as soon as possible.

Palani Ramaswamy, R.Palani@kent.ac.uk
Aruna Duraisingam, A.Duraisingam@kent.ac.uk
Emmanuel Molefi, E.Molefi@kent.ac.uk