**EE5907/EE5027: Q&A for CA1**

Before asking questions to the GAs, please check the Q&As below. If you have any questions, you must email the GAs (please do not write comments/questions on this page, as no one will respond to you).

1. When we are writing our code, do we need to follow the same range and fit the initial curve with approximately 20 points within the (0, 1) range, as shown in the example? Or can we expand the range slightly to better showcase the characteristics of the function?
   * You must follow what is shown in the instructions. If you think necessary, you can ADD other results in your submission.
2. Can we use np.vander to generate  which is a vandermonde matrix?
   * No, you must create the matrix by yourself.
3. Can we use np.matmul to do matrix multiplication? np.linalg.inv to do matrix inverse? np.array.T to do matrix transform?
   * Yes
4. Part 1: Is it possible for me to import MAP from scipy and fit it directly?
   * No, you must strictly follow the instructions, which state: "4. Fit the generated noisy data using the MAP as discussed in class."
5. Part 1: Looks like the answer to the error calculation has not been mentioned in the answers. Do we just need to display the error values?
   * Please follow the instructions.
6. Is the above way of calculating error correct?
   * We cannot answer this type of question, since it is your assignment.
7. A link of instructions to configure the python environment as well as the Jupyter notebook
   * <https://jupyter.org/install>
8. Will you share the reference codes that you showed us in the previous lecture?
   * Every piece of available information is provided on the course website. If you cannot find it, it means the information is not provided for you.

**EE5907/EE5027: Q&A for CA2**

Before asking questions to the GAs, please check the Q&As below:

1. Are libraries like sklearn allowed to implement algorithms such as PCA, LDA, KNN, GMM?

No. But you could directly use functions for eigenvalue decomposition, which could be a speedy solution as well.

1. For KNN classification using PCA and LDA, do we use the 500 samples to fit the KNN classifier or do we use all the samples from the training set to fit the classifier? If we only use 500 samples for fitting, what test images should we use?

Students should fit the classifier on the 500 randomly sampled images from the training set but should evaluate on all test images.

1. Do we have to use LibSVM or are we allowed to use sklearn library’s LinearSVM module?

Students should use the LibSVM library.