Guidelines for Using Generative AI / ChatGPT in Advanced Laboratory (Computational Labs)

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The computational labs are designed to help students develop their own computational skills. It is by grappling with coding challenges, debugging errors, and finding solutions that you will learn the most. Developing these problem-solving skills will be invaluable, not only in this lab, but throughout your academic and professional career.

Coding and Algorithms

- Students are allowed to use Artificial Intelligence (AI) tools, including ChatGPT, to improve their understanding of coding and to receive hints on how to generate code snippets or algorithms. However, you are strongly encouraged to attempt all tasks yourself.

- **You must disclose the use of an AI tool in your report and provide screenshots of any content produced by it as well as the prompt used to generate the content as an appendix with your report.**

- Students are required to thoroughly review and **understand any code generated by an AI**. It would be a mistake to assume that the output of an AI tool is always correct. Code generated by an AI should be tested, benchmarked, and revised as needed to ensure correctness, efficiency, and suitability for the specific task. **This testing should be documented in your report.**

- As always, students should be able to explain the physical principles and mathematical concepts underlying any code. During the interview component of the lab, I will ask you to explain how specific algorithms and functions work. Failure to demonstrate understanding of the code or algorithms will be reflected in the grade received.

Writing the Lab Report

I want to make it explicitly clear that **you cannot use AI to write your lab report**. Using an AI to write your lab report would constitute academic dishonesty and will be considered plagiarism. The primary goal of the lab report is to assess your understanding of the experimental process, your ability to analyse data, and your capability to communicate your results and analysis. Using AI to write the report would bypass these important learning objectives. The lab report is an essential component of your assessment, and it is expected to reflect your own work, understanding, and effort.

If you are in any doubt as to whether you are using generative AI / ChatGPT appropriately, I strongly encourage you to discuss it with me before proceeding.