## Self-reflection report on the use of large language models

Utilizing ChatGPT in our work brought about several benefits. One advantage was its capacity to resolve minor coding errors that occasionally occurred while addressing the more substantial challenge of the exercises. Additionally, it also was very valuable in solving error messages by offering potential solutions and helpful tips. This both enhanced our productivity immensely. It is however important to acknowledge that ChatGPT is an aid, not the solution. Caution needs to be exercised to prevent excessive reliance on the tool.

The extent to which ChatGPT can be harmful depends on the nature of the question posed to it. When dealing with theoretical subjects (especially if they are extremely specific within a certain field), we believe the tool has a negative impact. Rather than encouraging students to engage in extensive literary research and develop skills like critical reading and the ability to comprehend complex academic texts, it opposes to do so. In addition, the given information by ChatGPT is sometimes also incorrect or not well-founded with literature sources. Besides, the training data only includes documents up until September 2021, so any new research or coding tools are not taken into when generating an answer. However, in the context of resolving programming queries, ChatGPT can be a powerful asset. It boosts moral and presents the user with alternative approaches to solving programming errors/issues, thereby greatly benefiting the user.

Regarding our productivity, we saw a significant boost by using ChatGPT. Rather than getting stuck by minor, easily resolvable errors such as missing commas, we could allocate more time and focus to addressing the bigger challenge of our weekly assignments. It was for example useful for better understanding the question. We sometimes ran into the issue that questions within the weekly assignments were differently interpreted. ChatGPT helped in getting a better understanding. It was also useful in providing methods to visualize multiple figures in one. It was also useful for example in solving the issue in one of the exercises in which a file could not be found by the data, because an appended string could not be read.

The overall accuracy of ChatGPT in solving errors or providing partial answers, were accurate. The provided code frequently required modification/adaptation to align with our code and there is a need to cross-verify any given code obtained through the tool. Nevertheless, ChatGPT excelled in providing us with foundations upon which we could refine our solutions.