

In the following, we are going to categorise which type of NLP application applies for each use case: (using the categories we have discussed on this bootcamp so far)

- a. A model that allocates which mail folder an email should be sent to (work, friends, promotions, important), like Gmail's inbox tabs.

Text Classification in email folders is a common application of NLP that we encounter in our daily lives. It involves organising our spam folders and inbox by assigning predefined categories to different types of emails. This allows us to efficiently access and prioritise relevant messages, improving our overall email management.

- b. A model that helps decide what grade to award to an essay question. This can be used by a university professor who grades a lot of classes or essay competitions.

Automatic summarisation is a useful NLP approach for condensing enormous amounts of information, such as articles and novels, into brief summaries. It captures essential details while understanding emotional meaning, as Expert System (2020) mentioned. This strategy is especially beneficial for university lecturers with several classes and essay competitions because it allows for quick and fair grading by extracting essential points and interpreting the content and context of the essay.

- c. A model that provides assistive technology for doctors to provide their diagnosis. Remember, doctors ask questions, so the model will use the patients' answers to provide probable diagnosis for the doctor to weigh and make decisions.

One useful application of NLP is supporting doctors in offering diagnosis through question-answering. The model can offer probable diagnoses for doctors to consider and evaluate by utilising patients' responses to specific questions. This technology has evolved fast, with voice-based question-answering systems such as Siri and Okay Google. Similar to this, question-answering features are now offered by text-based chatbots incorporated into online retail and banking platforms.

References:

HyperionDev (2023) DS T22 - Capstone Project - NLP
[Online Coding Bootcamps | Learn to Code | HyperionDev](#)