

Using ChatGPT to write a
paper's introduction

The assignment description

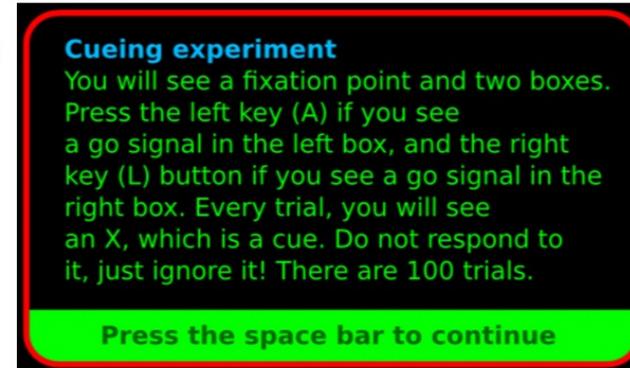
This duo assignment involves collecting data, data analysis and writing a scientific paper.

The experiment is about priming, cueing and attention. It looks at the how attention affects performance.

See e.g. the video below for some more details.

[Video](#) 

The experiment we use records participants' reaction time, cue-validity, was it presented left or right, correct or incorrect.



From each participant, also get the additional personal information required in the Google Sheets example data file.

Data needs to be collected by each student, and all the collected data pooled together is the basis for your paper. Instructions for data collection and analysis are below.

Using a subset of parameters of your choice from the data that is collected, come up with an original hypothesis to explore. Every duo works with the same data set, but every paper can be a unique project.

AI use instructions

Scientific Paper

Write an empirical scientific paper. The requirements can be found in the rubric section of this assignment. An example of a similar paper (on a different topic) can be found [here](#) ↓.

For the introduction of the paper, use ChatGPT.

You are required to detail your working process in a section of about 500 words.

This section has to make clear;

- what prompts did you use for which sections of the introduction.
- what prompts did you try but had to dismiss, and why.

Also, describe at least 3 factual errors that you found in ChatGPT's outputs and explain how you corrected them.

AI introduction rubric sections

<p>Introduction</p> <ul style="list-style-type: none">▪ Provides enough background, explains technical terms, and cites relevant literature▪ Problem and hypothesis have been clearly stated▪ The paradigm of the experiment is clearly explained	<p>10 Pts Full marks</p>	<p>0 Pts No marks</p>	<p>10 pts</p>
<p>Introduction AI - section</p> <ul style="list-style-type: none">▪ Describes in detail what prompts were used for which sections of the introduction.▪ Describes in detail what prompts were dismissed and why.▪ Describes at least 3 factual errors that were found in ChatGPT's outputs and explains how these were corrected.	<p>10 Pts Full marks</p>	<p>0 Pts No marks</p>	<p>10 pts</p>

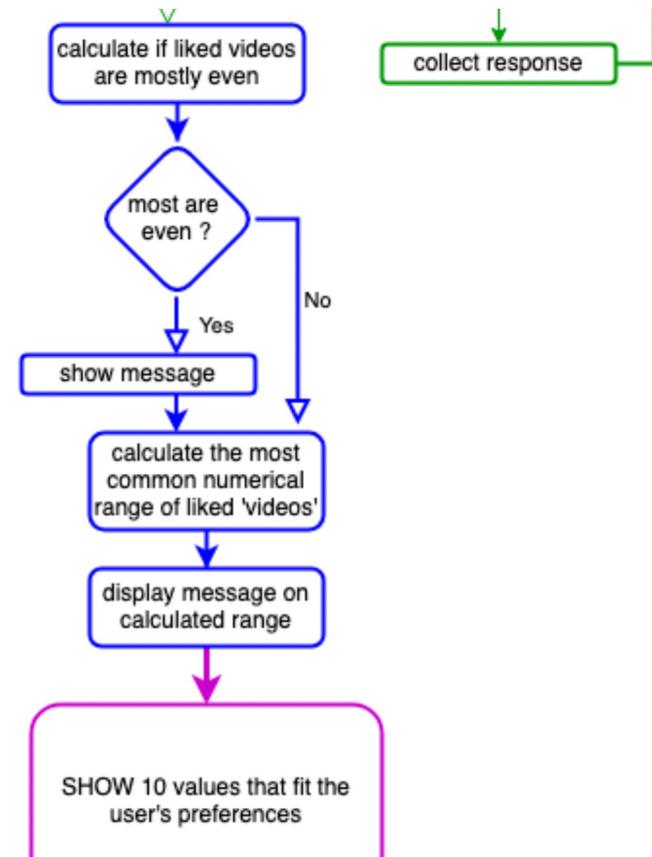
Overall impressions with students

- More than 2x the amount of words in written AI-reflections
- Only 1/15 students were positive about the 'help' of ChatGPT
 - Many factual errors
 - Untraceable sources
 - Made up sources
 - A lot of unrelated text

Using ChatGPT to solve a
coding challenge in class

Code for coding challenge snapshot

```
39 for videos = 1:howmanyruns; % sets the range
40
41 vid = randi(101);           % picks a random integer and assigns to variable 'vid'
42 behaviour(1,videos) = vid; % saves current value of 'vid' in 'behaviour'
43 disp(vid)                   % displays 'vid'
44 pause(1)                    % pauses one sec
45 clc                          % clears the commandwindow
46
47 % below the variable 'liked' is created, and using input() the user's
48 % reponse to a prompt is stored in it.
49 liked = input('liked it? if so enter "y". If not enter anything else ','s');
50
51 % now the current response, stored as 'liked', is compared to the string
52 % 'y' in the first if-statement. If this results in a boolean "true" this
53 % is stored as such in the second column of 'behaviour'. In any other case
54 % than a true, a boolean false is stored in the same place.
55
56 if liked == 'y'
57     behaviour(2,videos) = true;
58 else
59     behaviour(2,videos) = false;
60 end % terminates the if-block definition (which is run repeatedly).
61
62 end % terminates the for-block definition.
63 disp('done! with the loop presenting numbers.. now some calculations') % Shows 'done!' in the
64 pause(1)
```



Code challenge instructions

In class week 5: ([matlab .m-file here](#) ↓)

INFO

See flow chart below to guide you through the main process of the code. The **purple** part is your main task.
Take note of the comments in the code, in this code they set the bar for a more than decent amount of them.

For this assignment you are encouraged to use AI to solve the problem!

TASKS

- start by running the code, explore it, read the comments. Pretend you like only even numbers.
- add code that handles the case where most vids are 'odd' with a message.
- add code that generates a nr of 'vids' (i.e. numbers) based on the user's stored preferences (and shows them one by one and takes the response).
- optimise the code where possible

In class discussion after 45 mins of coding

- What approach did you use?
 - What prompts did you use?
 - What extra info did you provide ChatGPT?
 - Did you understand the output?
-
- Overall impression was that ChatGPT didn't make the challenge easier, only in a few cases.