



NUS
National University
of Singapore

| **Computing**

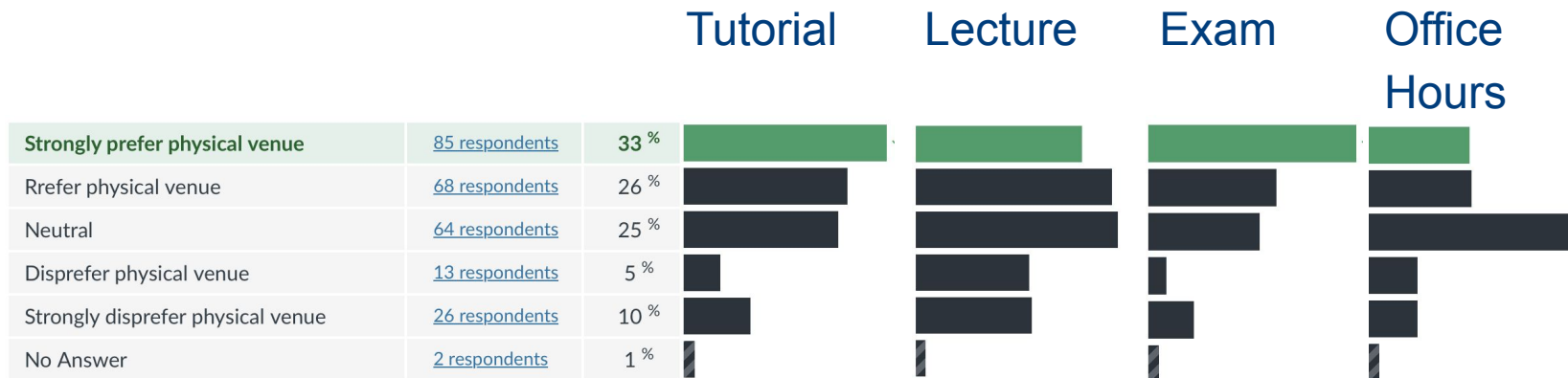
CS4248: Natural Language Processing

Lecture 3 — Pre-Flight Survey Results

Why are you taking this module?

It's a core requirement of my programme.	23 respondents	9 %	
It's an elective course (one of a basket) requirement for my programme.	103 respondents	40 %	
I need this course to graduate this coming semester.	55 respondents	21 %	
I'm taking a related focus area, minor or track that has this as part of the possible fulfilling courses.	139 respondents	54 %	
I'm a student doing research, and NLP is my research area or related to my research area.	24 respondents	9 %	
It looked interesting.	214 respondents	83 %	
I have friends that are taking this course.	70 respondents	27 %	
It fits well in my timetable.	52 respondents	20 %	
Someone referred me to take this course because of its content.	29 respondents	11 %	
Someone referred me to take this course because of its instruction staff.	26 respondents	10 %	
I like project courses.	40 respondents	16 %	
I saw that it was popular.	30 respondents	12 %	
I have fulfilled all the prerequisites for the course, so why not?	38 respondents	15 %	
Others, I've mentioned in the next question.	5 respondents	2 %	

Venues



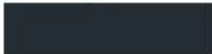
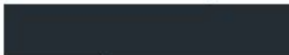
Major or Programme

Arts		0 %	✓
Business	9 respondents	3 %	
Computer Engineering	20 respondents	8 %	
Computer Sciences	175 respondents	68 %	
Data Science	51 respondents	20 %	
English Language, Foreign Language		0 %	
Linguistics		0 %	
Math / Statistics	22 respondents	9 %	
Masters	42 respondents	16 %	
Ph.D. Candidate		0 %	
SCALE / Continuing Education Learner		0 %	
Other	6 respondents	2 %	

Overseas?

Yes, abroad on exchange or NOC.	1 respondent	0 %	
Yes, on internship.	25 respondents	10 %	
Considering one of the two above.	13 respondents	5 %	
No, full-time local student (most students).	219 respondents	85 %	

NLP Career Path

No idea.	16 respondents	6 %	
Unlikely.	9 respondents	3 %	
Somewhat Unlikely.	29 respondents	11 %	
So-So.	72 respondents	28 %	
Somewhat Likely.	100 respondents	39 %	
Likely.	31 respondents	12 %	
No Answer	1 respondent	0 %	

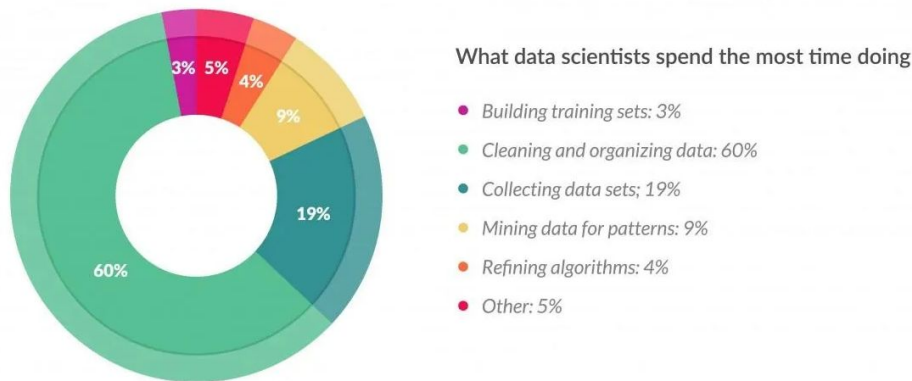
What do you want to learn?



What do you want to learn?

- *"Understanding LLMs such ChatGPT"*

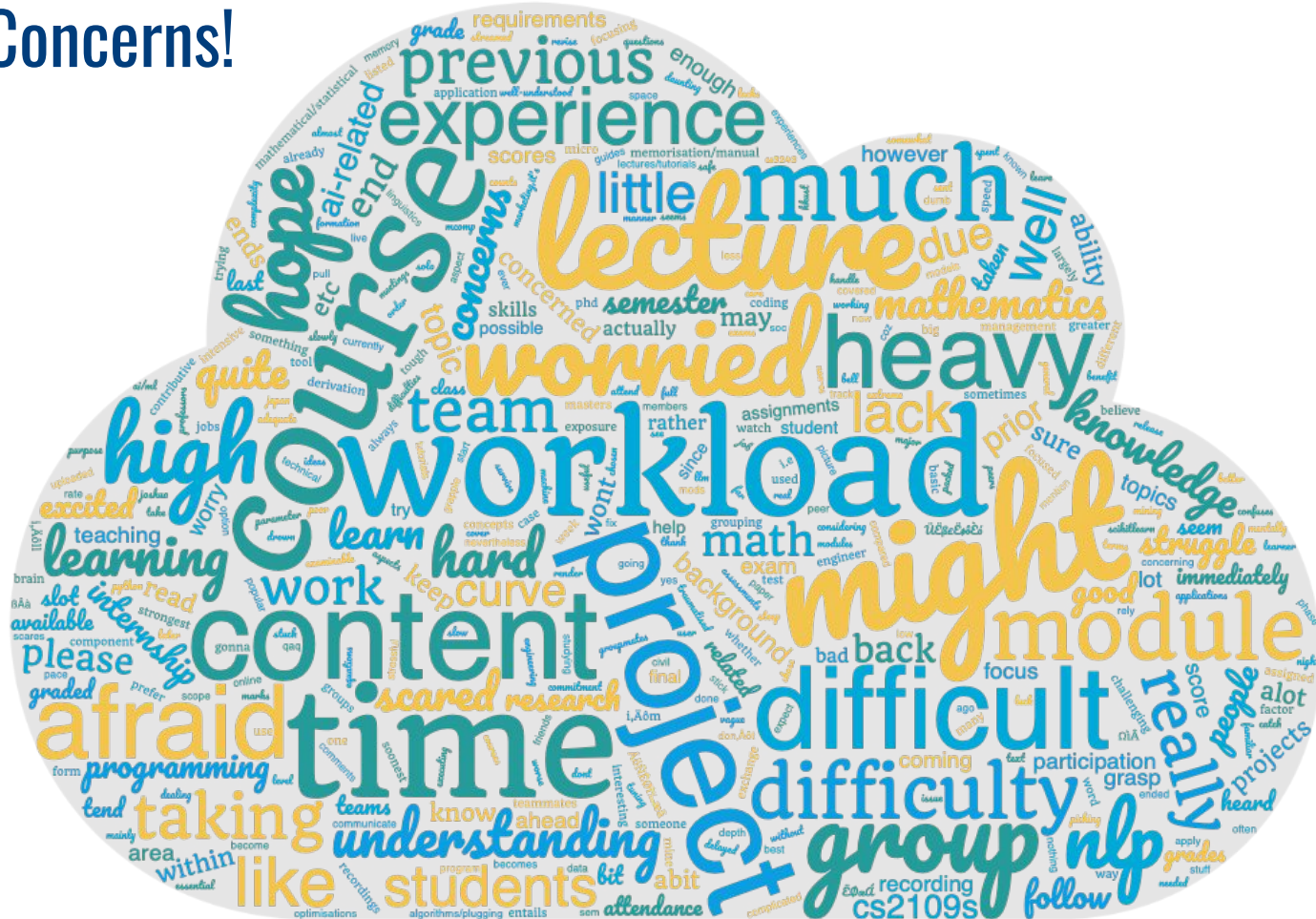
- Provocative statement: Nobody really understands LLMs, i.e., why/how they work!
- The way to understand LLMs requires a lot of background which we will cover
- We end with an introduction into LLMs, but they are not and can not be the focus of CS4248
(a dedicated graduate course covering LLMs is currently in the planning/preparation stage – stay tuned!)
- In practice, fine-tuning LLMs is much more about proper data preparation than the actual training



What do you want to learn?

- *HuggingFace, Langchain, Tensorflow, PyTorch, scikit-learn, numpy, etc.*
 - The lecture content focusing on the fundamental concept, not specific tools and libraries
 - We provide many practical examples in our series supplementary [notebooks](#)
 - You are free and encouraged to explore any available tools/frameworks/libraries for your project

Your Concerns!



Your Concerns — Our Comments

- *"I'm a total NLP/ML noob"*

- CS4248 is a introduction / foundation course – we basically start from scratch
- While some background knowledge is certainly useful, it's not a requirement
- We only focus on nitty-gritty details required for this course (e.g., we do not cover backpropagation)

- *"I'm worried that there will be lots of math."*

- Yes, there will be math, but nothing beyond fundamental concepts of algebra, probability, calculus
- What need we need in this course, you will need in any computer/data science field!
- We hope we cover the math bits in sufficient detail and clarity (if not, you can always ask!)

Your Concerns — Our Comments

- *"I've heard this course is hard!", "I'm afraid of the workload."*
 - Bias alert: We don't think that CS4248 is harder (or easier) than other courses
 - The assessment components are very similar to other course – participation marks are basically free marks :)
 - Consider assignments not just as an assessment component but as a learning experience
- *"I'm worried about the project."*
 - With reasonable effort, it is almost impossible to "fail" the project – we don't expect SOTA results :)
 - Basic suggestions: start early, continuous progress, regular team meetings (and/or with TA)
 - The project provides some flexibility to cater your background and interests
 - You can and should raise any inter-group conflicts incl. non-contributing members
(there will be 2 rounds of peer review sessions using TEAMMATES!)