# Google Alerts for detection of contract cheating

Nathan Clisby and Ant Edwards Swinburne University of Technology nclisby@swin.edu.au, awedwards@swin.edu.au

Australian Academic Integrity Network Forum 19 October, 2021

## Google alerts for detection of contract cheating

#### What problem does it solve?

- Detect improper sharing of test and assignment questions to Chegg and (potentially) other websites where contract cheating can occur.
- Minimise cognitive burden: set and forget.
- Google crawls the entire web frequently and so alerts are typically received within hours of a question appearing.
- Quick detection acts as disincentive to cheat, and reduces exposure of questions and solutions in the wild.

#### How does it work?

- Prior to release of the assessment, set up a Google Alert that searches for text fragments from the assessment.
- If any hits are detected you will receive an email alert from Google with the URL.

- Google Alerts URL: https://google.com/alerts (you will need a Google account).
- Search text: 32 words or less. Options: As-it-happens, All results.
- Chain together with OR operator "rare" text snippets in double quotes.
- E.g.: "Sketch the graph of an even function f (x) that is defined for" OR "Sketch the graph of an odd function g(t) that is defined for" OR "function. Determine if the function"
- For individualised assessments ensure that snippets are common to all versions.
- 6 words of mathematical text, even with common words, will result in few hits.

the web for interesting n	w content			
、"Sketch the graph of a	n even function f (x) the	at is defined for	OR "Sketch	×
How often	As-It-happens	0		
Sources	Automatic	٥		
Language	English	٥		
Region	Any Region	٥		
How many	All results	\$		
Deliver to	clisby@gmail.com	٥		
Update elect Hide options	•			
Alert preview				
There are no recent res match your search que	ults for your search q y.	uery. Below are	e existing results	that
WEB				
3. [5 marks] Let Ae(2) be a Chegg Answer to 3. [5 marks] Let Ae(2	be an even function, B.(2) an	- Chegg		

"Sketch the graph of an even function f ( for" OR "Sketch the graph of an odd fun defined for" OR "function. Determine if th As-8 happens update : October 9, 7021	(x) that is defined ction g(t) that is he function"
WEB	
1. [10 marks] Sketch the graph of an even function   Ch	negg.com
Chegg	
Transcribed image text: 1. [10 marks] Sketch the graph of an even function which has the following properties f(0)	on $f(x)$ that is defined for all $x \in \mathbb{R}$ and
Flag as irrelevant	

Google Alerte ------

### Google alerts for detection of contract cheating

- We have received various alerts from Chegg that have detected cheating. (False positives: Course Hero, Quizlet, Brainly, Numerade, Byjus, Gauthmath.)
- Chegg is indexed by Google. This is Chegg's choice, presumably because it drives traffic to their site.
- Chegg will takedown questions within a couple of days of an "Honor Code" request, and provide account information of question submitter.
- Typically this account information will not identify the student, as users can sign up with any email address.
- Ideally: generate unique questions for each student, and that way identification can occur purely based on question that has been shared.
- Nathan Clisby & Antony Edwards (2021) Individualized summative assessments as used during COVID-19, International Journal of Mathematical Education in Science and Technology, DOI: 10.1080/0020739X.2021.1982040
- See this "how to" at https://clisby.net/teaching/alerts